

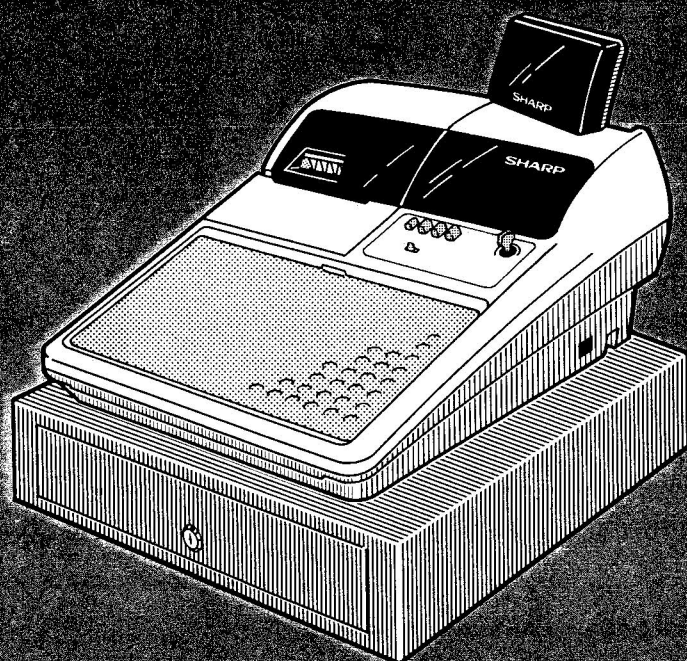
SHARP®

ELECTRONIC CASH REGISTER

MODEL

ER-A550

INSTRUCTION MANUAL



If undue force is applied to the drawer, the cash register will become unstable.

This apparatus complies with the requirements of EN 55014, 02. 1987 and BS 800: 1988.

Dieses Gerät stimmt mit den Bedingungen der EN 55014, 02. 1987 überein.

Cet appareil répond aux spécifications de la EN 55014, 02. 1987.

Dit apparaat voldoet aan de vereiste EN 55014, 02. 1987.

Apparatet opfylder kravene i EN 55014, 02. 1987.

Questo apparecchio è stato prodotto in conformità alle EN 55014, 02. 1987.

Αυτή η συσκευή τηρεί τις προδιαγραφές της EN 55014, 02. 1987.

Este aparelho responde às especificações da EN 55014, 02. 1987.

Este aparato cumple las especificaciones de la EN 55014, 02. 1987.

CAUTION:

For a complete electrical disconnection pull out the mains plug.

VORSICHT:

Zur vollständigen elektrischen Trennung vom Netz, den Netzstecker ziehen.

ATTENTION:

Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.

AVISO:

Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

VARNING:

För att helt koppla från strömmen, dra ut stickproppen.

INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A550. Please read this Manual carefully before operating your machine in order to gain a full understanding of its functions and performance. Please keep this Manual for future reference. It will help you, if you encounter any operational problems.

IMPORTANT

- **Install your ER-A550 in a location that is not subject to direct radiation, unusual temperature changes, high humidity or exposed to water sources.**
Installation in such locations could cause damage to the cabinet and the electrical components.
- **The register should not be operated by an individual with wet hands.**
The water could seep into the interior of the ER-A550 and cause component failure.
- **When cleaning your register, use a dry, soft cloth. Never use volatile liquid, such as benzine and thinner.**
The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- **The ER-A550 register plugs into any standard wall outlet (Official (nominal) voltage).**
Other electrical devices on the same electrical circuit could cause the ER-A550 to malfunction.
- **If the register malfunctions, call your local dealer for service — Do not try to repair the register yourself.**

PRECAUTION

This Electronic Cash Register has a built-in memory protection circuit which is operated by rechargeable batteries.

As you know, all batteries will, in time, dissipate their charge even if not used.

Therefore to insure an adequate initial charge in the protection circuit, and to prevent any possible loss of memory upon installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to use by the customer.

In order to charge the batteries, the machine must be plugged in and its power switch must be set to the "ON" position. This recharging precaution can prevent unnecessary initial service calls.

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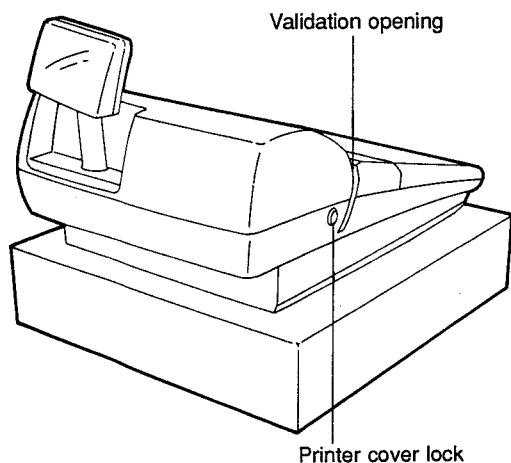
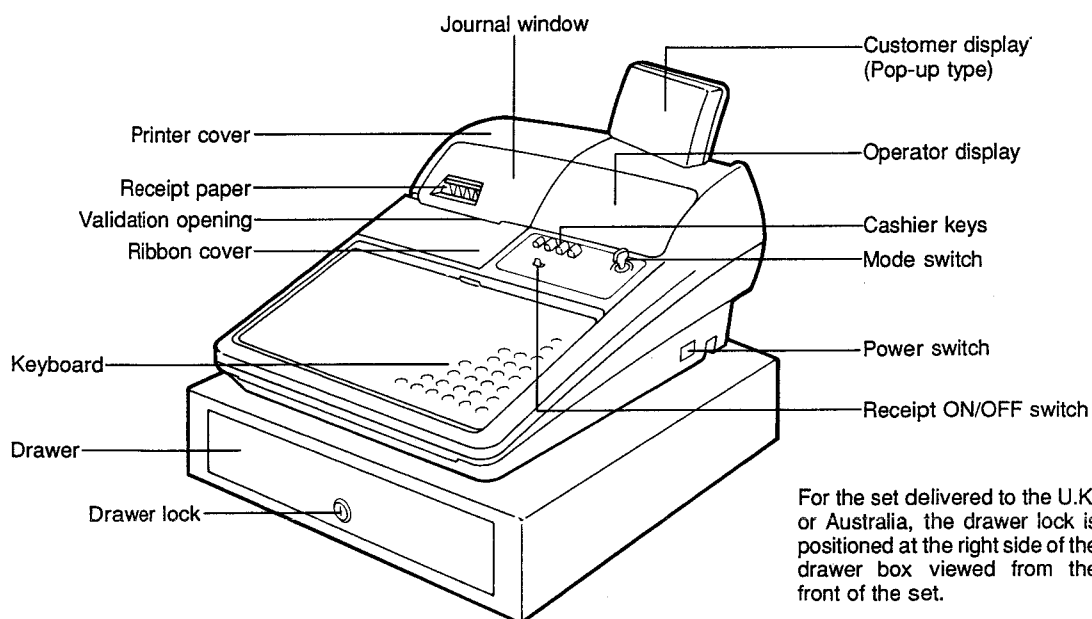
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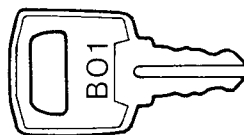
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PHYSICAL CHARACTERISTICS OF THE ER-A550 REGISTER



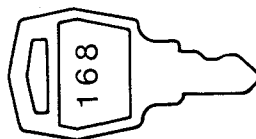
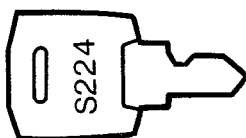
- Drawer lock
Lock: Turn 180 degrees counterclockwise.
Unlock: Turn 180 degrees clockwise.
- Drawer lock key



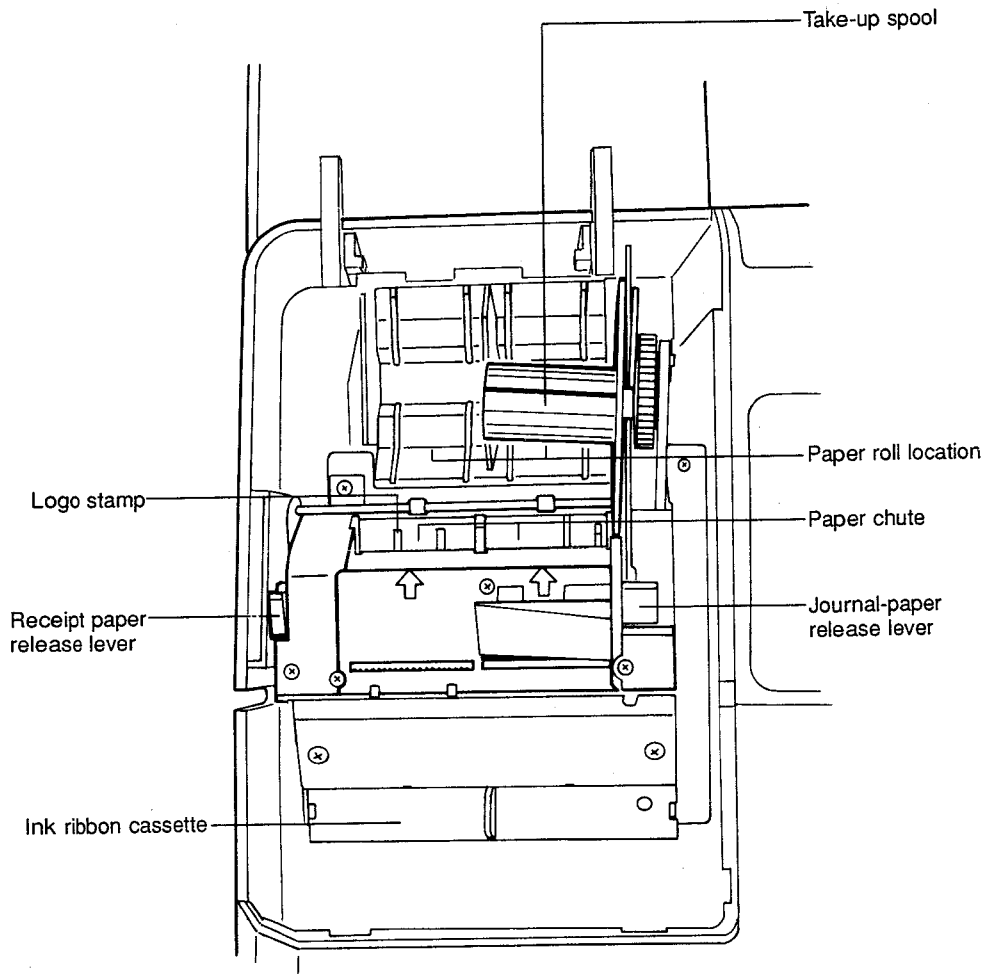
(For the set delivered to the U.K. or Australia)
Unlock: Turn 90 degrees clockwise.

- Drawer open key

- Printer cover lock
Lock: Turn 90 degrees clockwise.
Unlock: Turn 90 degrees counterclockwise.
- Printer cover lock key



Printer



- Paper release lever
Used to load or unload the machine with paper roll (receipt and journal paper). Keep the lever down to take in or out the paper roll.

Note:

Do not attempt to take in or out the paper roll with this lever at the up position.
This may result in damage to the printer.

KEYBOARD LAYOUT AND SWITCH AND KEY DESCRIPTIONS


1. Keyboard

Standard keyboard layout

↑ RECEIPT	↑ JOURNAL	5	10	15	20	L3	10	20	30	40	50	60	70	80	90
RCPT	VP	4	9	14	19	L2	9	19	29	39	49	59	69	79	89
SLIP	GC COPY	3	8	13	18	L1	8	18	28	38	48	58	68	78	88
AUTO 1	AUTO 2	2	7	12	17	PB-	7	17	27	37	47	57	67	77	87
NS	VAT	1	6	11	16	PB+	6	16	26	36	46	56	66	76	86
	#	⊗	•	CL	AMT	NBAL	5	15	25	35	45	55	65	75	85
⊖1	⊖2	7	8	9	PLU/ SUB	CR2	4	14	24	34	44	54	64	74	84
%1	%2	4	5	6	EX1	CR1	3	13	23	33	43	53	63	73	83
PO	RA	1	2	3		CH	2	12	22	32	42	52	62	72	82
RF	∞	0	00	000	ST	TL	1	11	21	31	41	51	61	71	81

Note: All the keys but the receipt paper feed and journal paper feed keys can be changed in their positions.
If you want to change the layout, however, contact your dealer.

0	} Numeric keys	SLIP	Slip print key
?		VP	Validation print key
9		NS	No sale key
00		VAT	Value added tax key
000			
•	Decimal point key	%1	} Percent 1 and 2 keys
CL	Clear key	%2	
⊗	Multiplication key	⊖1	} Discount 1 and 2 keys
1	} Department keys	⊖2	
?		PB-	Previous balance minus key
20		PB+	Previous balance plus key
↑ RECEIPT	Receipt paper feed key	NBAL	New balance key
↑ JOURNAL	Journal paper feed key	EX1	Foreign currency exchange 1 key
1	} Direct price lookup/subdepartment keys	#	Non-add code key
?			
90		RA	Received-on-account key
RCPT	Receipt print key		

PO	Paid-out key	CR1	}	Credit 1 and 2 keys
GC COPY	Guest check copy key	CR2		
RF	Refund key	CH		Cheque key
	Void key	AMT		Amount key
PLU/SUB	Price lookup/subdepartment code entry key	ST		Subtotal key
L1	}	TL		Total (cash total) key
L2		AUTO 1	}	Auto 1 and 2 keys
L3		AUTO 2		

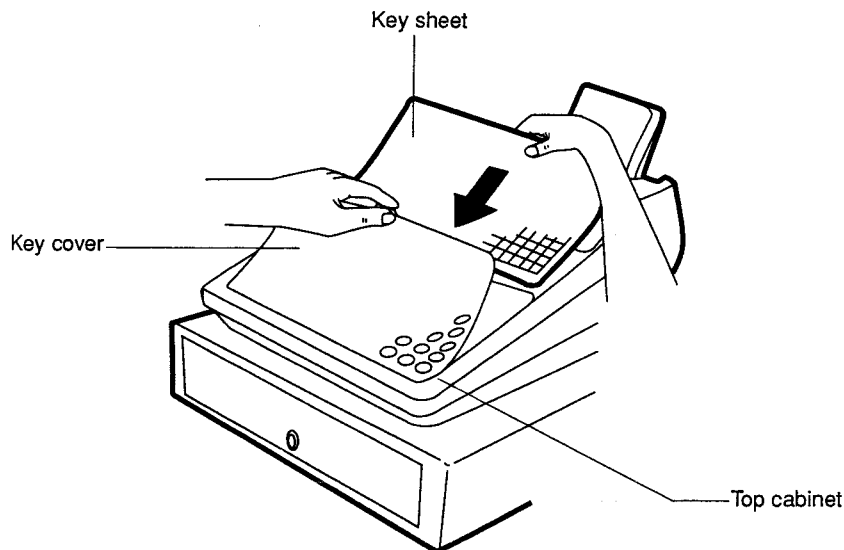
The following function keys can optionally be mounted in addition to those shown in the figure of the standard key layout. Consult your dealer.

<div>21</div> <div>2</div>	}	Department keys	<div>1/2</div>	}	1/2 key
<div>50</div>			<div>%3</div>		
<div>91</div> <div>2</div>	}	Direct price lookup keys	<div>%4</div>	}	Percent 3 and 4 keys
<div>160</div>			<div>CA2</div>		
<div>CR3</div> <div>2</div>	}	Credit 3 through 8 keys	<div>AUTO 3</div> <div>2</div>	}	Auto 3 through 5 keys
<div>CR8</div>			<div>AUTO 5</div>		
<div>⊖3</div>	}	Discount 3 and 4 keys	<div>RA2</div>	}	Received-on-account 2 key
<div>⊖4</div>			<div>PO2</div>		
<div>EX2</div> <div>2</div>	}	Foreign currency exchange 2 through 4 keys		}	Paid-out 2 key
<div>EX4</div>					

Attaching of the key sheet

The ER-A550 packing carton contains two types of key sheet: the sheet for the standard keyboard layout and that for programming.

Insert the key sheet between the keyboard cover and the top cabinet as illustrated below.



Note 1) Do not pull the keyboard cover too tightly. The cover may tear.

Note 2) Replace the key sheet with new one if by chance it gets wet. Too long use of a wet key sheet may result in a machine trouble.

Note 3) Too thick or hard sheets can make key operation difficult.

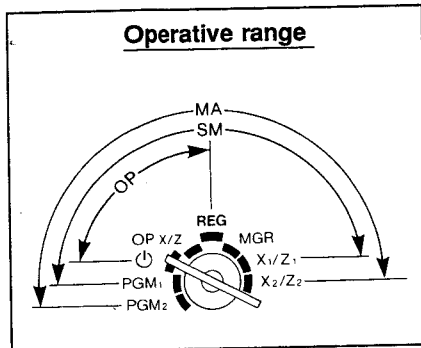
Note 4) Spread the key sheet properly under the keyboard cover, without any folds or wrinkles, to ensure easier key-in operation.

Note 5) If you require the key sheet, please consult your dealer.

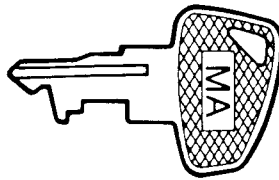
Keyboard cover will wear out. If your keyboard cover is dirty or broken, replace the cover with a new one. For details, consult your local dealer.

2. Mode switch and mode keys

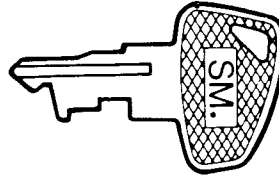
The mode switch can be operated by inserting one of the three supplied mode keys — manager (MA), submanager (SM), and operator (OP) keys. The keys can be inserted or removed only when they are in the REG or ⏻ position.



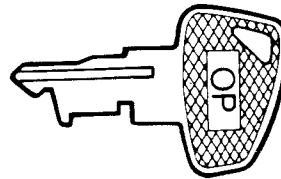
• Manager key (MA)



• Submanager key (SM)



• Operator key (OP)



- * The power switch is positioned at the right side of the cabinet viewed from the front of the set. Set the power switch to the ON position prior to using your machine.

The mode switch has these settings:

- ⏻ : For switching off the display to prevent keyboard entries (This setting does not turn off the AC power.)
- OP X/Z : For individual cashier reading and resetting and for displaying the time
- REG : For various entries
- PGM1 : For programming those items that need to be changed often: e.g., unit prices of departments or PLUs and percentages
- PGM2 : For various PGM1 programming and programming of those items that do not require frequent changes: e.g., date, time, or a variety of register functions
- MGR : Only the manager can use this setting to make various entries that are not permitted to be made by cashiers – for example, after-transaction voiding and limit overriding.
- X1/Z1 : For reading and resetting of any daily totals
- X2/Z2 : For reading and resetting of any periodic totals

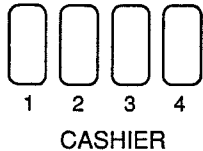
3. Cashier keys

The ER-A550 allows the operator to use cashier keys in the following two ways.

- Push-button cashier keys (4 cashiers)
- Real cashier keys (6 cashiers)

The standard machine has been shipped with the push-button cashier key system being programmed. If you want to change the cashier system, consult your dealer.

(1) Push-button cashier keys (1, 2, 3, and 4)



These keys identify cashiers. Press any one of these keys. The register prints the symbol and cashier name that correspond to it both on the receipt and on the journal.

(2) Real cashier keys (1, 2, 3, 4, 5, and 6)



Individual cashiers are distinguished by the respective keys inserted into the cashier switch.

4. Receipt ON-OFF switch

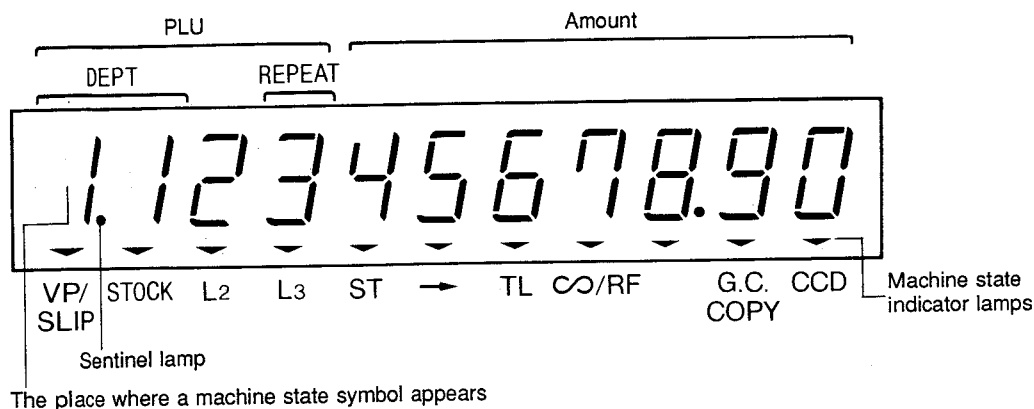


This switch permits or prohibits receipt printing. To permit printing on the journal alone without receipt, slide the switch to the OFF position and to permit printing on both the journal and the receipt, slide it to the ON position.

Note: Your register will print receipts regardless of the position of this switch except when the mode switch is in the REG position. This means that the receipt roll must be installed even when this switch is kept in the OFF position.

DISPLAYS


1. Operator display



- The number of repeats is displayed from "2" and counted up with each repeat. When you've registered ten times, the display shows "0".

Example: (2 → 3 → 4 ... 9 → 0 → 1 → 2 ...)

Machine state symbols

- P** : Appears in the eleventh place from the right during programming.
- E** : Appears in the eleventh place when an error is detected. Two-digit error code will follow this symbol.
- : Appears when an entry is made into a minus department or PLU/subdept. and when (Floating) discount, reduction, or refund entry is made or corrected.
- 0** : Appears in the eleventh place when the tax-included subtotal is displayed or when the amount tendered is smaller than the sale amount.
- U** : Appears in the eleventh place when the  key is depressed in the MGR mode, indicating entry into the VOID mode. While your register is in the VOID mode, this symbol continues to be in the display except when department numbers, PLU numbers or tax-included subtotals are displayed. And appears when a subtotal void is made.
- : Appears right below the eleventh place when the cash in drawer amount exceeds a (Sentinel lamp) programmed sentinel amount. The sentinel check is performed for the total cash in drawer.
- C** : Appears in the eleventh place when the **EX1** ~ **EX4** keys are pressed to calculate a subtotal in foreign currency.

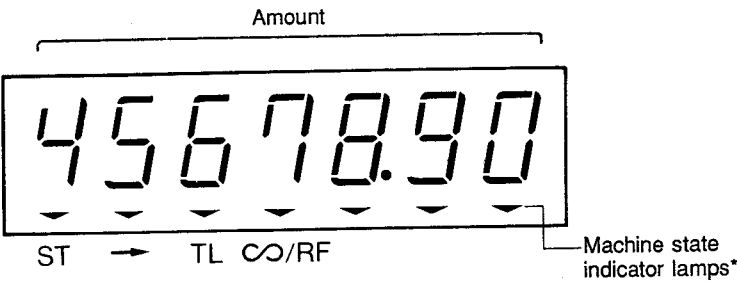
• Error code table

Error code	Error status
E01	Registration error
E02	Misoperation
E03	Undefined code error
E04	Paper empty
E05	Secret code error
E07	Memory is full.
E10	Out of stock
E11	Compulsory of pressing the ST key
E12	Compulsory of tendering
E13	Compulsory of PB entry
E16	Check digit error
E22	Overlapped cashier error
E23	Cashier resetting over error
E25	Set slip paper again.
E26	File type error
E31	Compulsory of non-add code entry
E32	The cashier key is not pressed.
E33	The cashier key is changed in the transaction.
E34	Overflow limitation
E35	The open price entry is inhibited.
E36	The unit price entry is inhibited.
E37	The direct non-tendering finalization after previous tender entry is inhibited.
E39	Power-off during slip paper feed

• Machine state indicator lamps

- VP/SLIP** : Lights up when the machine is programmed for compulsory validation printing or slip printing.
- STOCK** : Lights up when a PLU whose stock is negative is entered.
- L2** : Lights up when the PLU level is second.
- L3** : Lights up when the PLU level is third.
- ST** : Lights up when a subtotal is displayed.
- : Lights up when the change due is displayed after an amount tendered entry.
- TL** : Lights up when a transaction is finalized with the **TL**, **CA2**, **CH** or **CR1** through **CR8** key. However, this lamp does not light up when a transaction is finalized with an amount tendered key.
- ∞/RF** : Lights up when the **∞** key is pressed or when an item void entry is made.
Lights up when the **RF** key is pressed or when a refund item entry is made.
- G.C. COPY** : Lights up when the machine is in the GUEST CHECK COPY mode.
- CCD** : Lights up when the machine is programmed for compulsory cash/cheque declaration.

2. Customer display (Pop-up type)

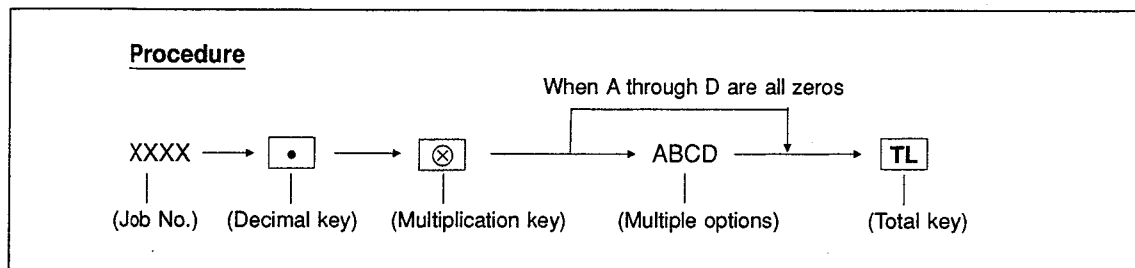


* These lamps light up in the same manner as the machine state indicator lamps in the operator display.

GENERAL INSTRUCTIONS

There are a few things you should keep in mind when programming the ER-A550.

The following sections are considered general instructions because they apply to the majority of jobs and procedures contained in this manual. If you take the few minutes to read these, you might save yourself some time and aggravation when programming.



Entering numbers

When entering the job number or numbers as part of a procedure, use the numeric key. It contains the decimal $\boxed{\bullet}$ key and the $\boxed{\otimes}$ key used in all procedures.

To change memory

To change the memory of the machine, always press the decimal $\boxed{\bullet}$ key after entering the job number.

Reading a program

To take a reading of a program, that is printed on the register printer, do not press the decimal $\boxed{\bullet}$ key as indicated in the procedure. After you press the \boxed{TL} key, the reading is printed on the register printer.

Entering options as a part of a procedure

In procedures that allow entry of multiple options, e.g., A B C D, **leading zeros are not required**; however, **trailing zeros are required**. In the A B C D example, if you wanted to program a 1 for the C option, you would enter 10. (Leading zeros for A and B are not required; trailing zeros are required.)

Reading and entering key operations

You'll notice that there's an illustration for each job entitled – Key operation. What that illustration shows is how you would enter the associated example into the machine, using the numeric and alpha key.

The key operation for setting the register number is listed as:

2612	$\boxed{\bullet}$	$\boxed{\otimes}$	(1)
123456		\boxed{TL}	(2)

In (1) above, you would enter 2612, press the decimal $\boxed{\bullet}$ key and then press the $\boxed{\otimes}$ key.

In (2) above, you would enter 123456 (for the sample register number) and then press the \boxed{TL} key. This completes the procedure.

In most cases you end a procedure by pressing the \boxed{TL} key.

Recovering from an error message

If you happen to get an error beep and message when programming, to recover and correct the condition, simply press the \boxed{CL} key. You'll notice that the error code is cleared from the display and you can continue programming.

HOW TO PROGRAM ALPHANUMERIC CHARACTERS

Use the accompanying programming key sheet to key in numbers, letters and symbols.

Using the assigned touch keys, it is easy to program alphabetical letters as well as symbols (refer to job# 2114 on page 24 and job# 2214 on page 33).

- Numerals, letters and symbols are programmable simply by pressing the touch keys.
- Double-size characters can be made by using the (DC) key.

Example: To program the word "SHARP" in double size, do the following key-in.

(DC) S (DC) H (DC) A (DC) R (DC) P

- Small letters can be made by using the (SHIFT) key.

Example: To program the word "Sharp", do the following key-in.

S (SHIFT) H A R P

- In this layout there are all the keys required for programming. So you can do every kind of programming on this key sheet.

Programming key sheet

↑ RECEIPT	↑ JOURNAL		â	ê	è	é	î	í	ô	ò	ó	û	ü	ú
Γ	Π		à	∞	Æ	Ø	Å	Ñ	Ç	✕	Pt	£	[]
(SLIP)	Σ		á	∞	ı	!!	←	→	◀	▶	↑	↓	-	¿
Θ	Υ		{	}	”	@	..	,	‘	<	>	^	=	+
Λ	Φ	1/2	(DC)	i	!	“	§	\$	%	¢	&	()	*
Ξ	Ψ	⊗	•	CL	1	2	3	4	5	6	7	8	9	0
1	Ω	7	8	9	Q	W	E	R	T	Y	U	I	O	P
2	Δ	4	5	6	A	S	D	F	G	H	J	K	L	Ö
3	œ	1	2	3		Z	X	C	V	B	N	M	;	:
4		0	00	000	ST	TL	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SHIFT)	,	.

-Note 1) The shaded keys () cannot be used as a character key.

Note 2) The (DC) means double-size character code and this key is used for double-size character programming.

PROGRAMMING

Your machine allows you to program in two modes: PGM1 and PGM2. The PGM1 mode is for programming those items that need to be changed often: unit prices of departments/PLUs, and percentages. The PGM2 mode is used for programming all PGM1-mode programs and those items that require less frequent changes: date, time, tax rate, and the functions of each key.

We describe below the programming or setting procedures of various items. Program every item necessary for your store following the appropriate procedures.

- * To set the mode switch to the PGM1 position, use the manager or submanager key; and to set to the PGM2 position, use the manager key.

Preparations for programming

1. Plug your machine into a standard wall outlet.
2. Put the manager or submanager key in the mode switch and turn it to the PGM1 or PGM2 position depending upon the programming you are about to do.
3. Press any one of the push-button cashier keys.
4. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt rolls correctly.
5. Program necessary items into your machine.

1. Setting the date and time (PGM2 mode)

(1) Setting the date

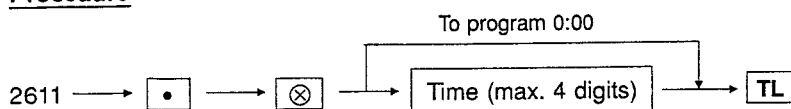
Procedure

2610 → ☐ → ☐ → Date (6 digits) → ☐

Key operation	Print
2610 <input type="checkbox"/> <input type="checkbox"/>	
<u>21</u> <u>09</u> <u>93</u> <input type="checkbox"/>	21/09/93 0:00 01-1
Day Month Year	000000#0001
	#2610 *PGM2*
	21/09/93

(2) Setting the time

Procedure



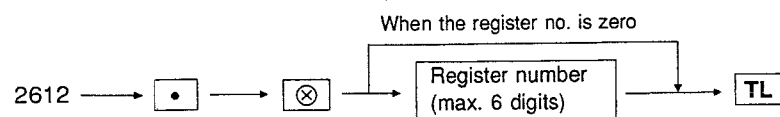
Key operation	Print
2611 [.] [⊗] 13 30 | | Hour Minute TL	<pre> 21/09/93 13:30 01-1 000000#0002 #2611 XPGM2X 13:30 </pre>

Note: Your machine can be programmed to display and print the time on the 12-hour system.

2. Setting the register number (PGM2 mode)

When your store has two or more registers, it is practical to set separate register numbers for their identification. You may set them in a maximum of six digits.

Procedure

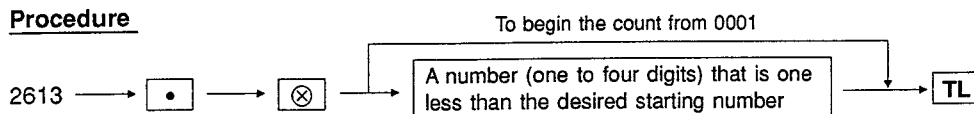


Key operation	Print
2612 [.] [⊗] 123456 TL	<pre> 21/09/93 13:30 01-1 123456#0003 #2612 XPGM2X 123456 </pre>

3. Setting the consecutive number (PGM2 mode)

The consecutive number is increased by one each time a receipt is published.
Enter a number (one to four digits) that is one less than the desired starting number.

Procedure



Key operation	Print
2613 [.] [⊗]	21/09/93 13:31 01-1
Start from "1001"	123456#1000
1000 [TL]	#2613 XPGM2X
	1000

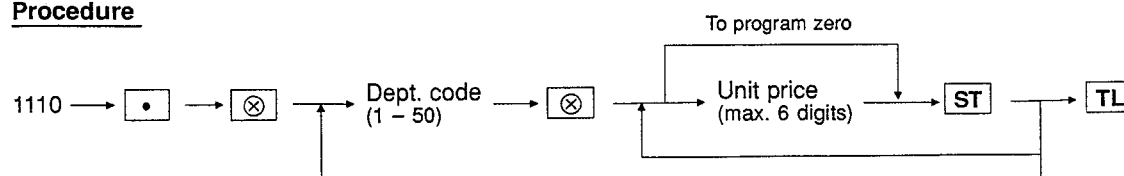
4. Programming for departments

Your machine allows you to perform the following programming for each department.

(1) Programming of unit prices (PGM1 or PGM2 mode)

Program a unit price for each department.

Procedure



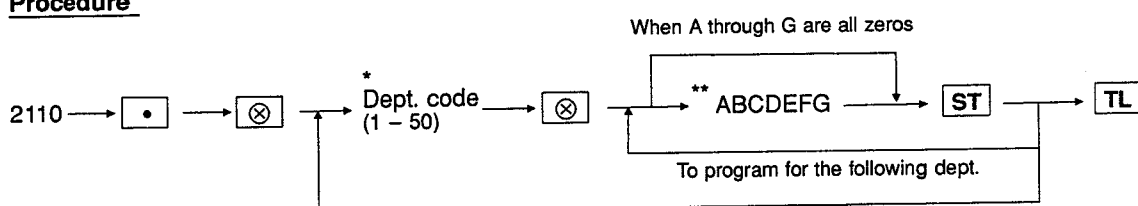
When the programming for the largest department code is completed with depression of the [ST] key, the programming operation terminates automatically. This holds true of every programming for departments.

Key operation	Print
1110 [.] [⊗]	#1110 XPGM2X
10 [⊗]	D*10 1.50
150 [ST]	DPT.10 001
[TL]	0000003 KP- L17

(2) Functional programming (PGM2 mode)

- ① Compulsory item validation print
If item entries must be validated, program corresponding departments for compulsory item validation print.
- ② SIF (Single-item finalization), SICS (Single-item cash sales), or normal sales
Each individual department can be programmed as an SICS, SIF or normal department.
- ③ Four types of unit price entry
You may select one of the following four types of unit price entry for each department.
 - (a) Open and preset
 - (b) Preset only
 - (c) Open only
 - (d) Inhibit department key

Procedure



* Dept. code: Standard 20 departments/max. 50 departments

**

		Item	Entry
B	Item validation print	Compulsory	1
		Non-compulsory	0
E	SIF/SICS/Normal	SIF (Single-item finalization)	2
		SICS (Single-item cash sales)	1
		Normal	0
G	Type of unit price entry	Open and preset	3
		Preset only	2
		Open only	1
		Inhibit	0

A, C, D, and F: Not used (Enter 0 for A, C, D, and F.)

Key operation

2110 • ⊗

1 ⊗ 3 ST

TL

Print

```

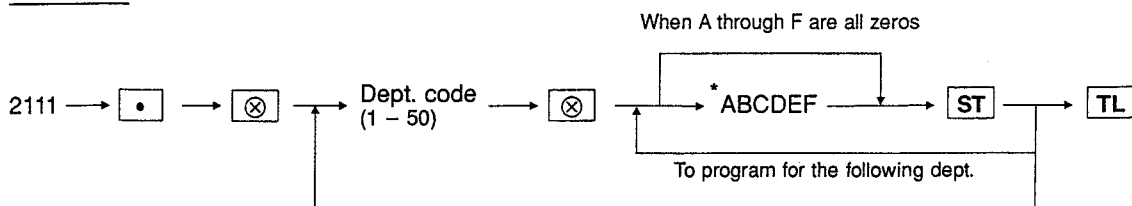
#2110 *PGM2*

D01          0.00
DPT.01      G01
0000003    KP-   L17
          
```

(3) Programming of tax status (PGM2 mode)

Program a tax status for each department.

Procedure



Item	Tax status			Entry
	Ordinary system	Swiss system	Selection	
C		VAT1	YES	1
			NO	0
D	VAT3 or TAX3	TAX3	YES	1
			NO	0
E	VAT2 or TAX2	TAX2	YES	1
			NO	0
F	VAT1 or TAX1	TAX1	YES	1
			NO	0

A and B: Not used (Enter 0 or nothing for A and B.)

Note 1: Item C is programmable only for the Swiss tax system.

Note 2: When the Swiss tax system has been selected, one of Tax3 (D), Tax2 (E), and Tax1 (F) can be selected in combination with VAT1 (C).

Example: CDEF = 1001, 1010 or 1100

Note 3: The tax system of your machine has been factory-set to automatic VAT1 – 3. If you desire to select any of automatic tax 1 – 3, manual VAT1 – 3, manual VAT1, manual tax 1 – 3, and Swiss tax systems, contact your dealer.

Key operation	Print
2111 <input type="button" value="•"/> <input type="button" value="⊗"/>	<pre> #2111 *PGM2* D01 T1 3 0.00 DPT.01 G01 0000003 KP- L17 D09 T 23 0.00 DPT.09 G01 0000001 KP- L17 </pre>
1 <input type="button" value="⊗"/>	
101 <input type="button" value="ST"/>	
9 <input type="button" value="⊗"/>	
110 <input type="button" value="ST"/>	
<input type="button" value="TL"/>	

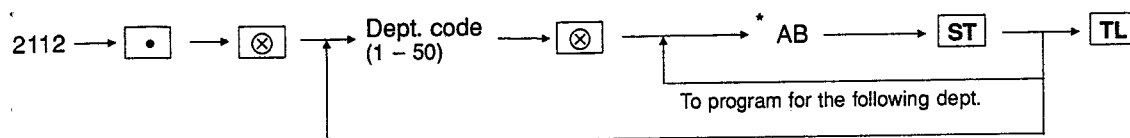
(4) Setting a limit amount (HALO) of entry (PGM2 mode)

You can set upper limit amounts (HALO: High Amount Lockout) for each department.

The limit is effective for the REG-mode operations and can be overridden in the MGR mode.

HALO limit is represented by two figures as follows.

Procedure



* AB is the same as $A \times 10^B$.

A: Significant digit (1 through 9)

B: 0 through 7

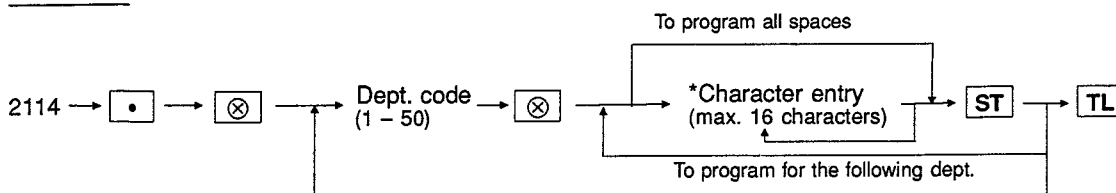
For example, presetting 14 (100.00) here means that amount entries up to 100.00 are allowed in REG mode. (In this case, HALO limit is 100.00.) But when you preset 17, the HALO limit is 99999.99.

Key operation	Print
2112 . x	<pre> #2112 *PGM2* D01 T1 3 0.00 DPT.D1 G01 0000003 KP- L16 D08 0.00 DPT.08 G01 0000001 KP- L15 </pre>
1 x 16 ST	
8 x 15 ST	
TL	

(5) Programming of department text (PGM2 mode)

You can program a maximum of 16 characters (standard: 8 characters, option: 16 characters) for each department. You can program the text either by using character keys or by entering character codes.

Procedure



Note: If you enter a wrong character, you can delete it with the **BACK SPACE** key.

The **BACK SPACE** key deletes the last character.

1) When entering characters by using character keys: (Refer to page 17.)

-- y y y y y y y y y y y y y y y y --

y: character key

- Find out desired character key(s) on the alphanumeric key sheet and press the key(s).
- If you press the **(DC)** key (double-size character key) before pressing character key, that character is printed in double size.
- If you press the **(SHIFT)** key, the following characters are printed in small letters. And if you press the **(SHIFT)** key again, the following characters are printed in capital letters.

Key operation	Print
2114 . ⊗	<pre>#2114 *PGM2* D01 T1 3 0.00 STEAK G01 0000003 KP- L16</pre>
1 ⊗ (DC) S T E A K ST	
TL	

2) When entering characters by using corresponding character codes (see the alphanumeric character code table on the next page.)

ZZZ → **00**

ZZZ is a character code.

Key operation	Print
2114 . ⊗	<pre>#2114 *PGM2* D01 T1 3 0.00 STEAK G01 0000003 KP- L16</pre>
1 ⊗	
253 00 083 00 084 00	
069 00 065 00 075 00 ST	
TL	

ALPHANUMERIC CHARACTER CODE TABLE

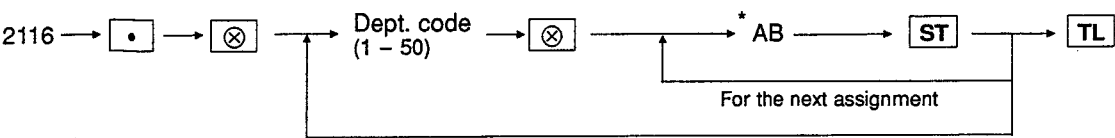
CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.
001	á	033	!	065	A	097	a	129	₁	161	◦
002	â	034	"	066	B	098	b	130	₂	162	┐
003	ê	035	#	067	C	099	c	131	₃	163	└
004	î	036	\$	068	D	100	d	132	₄	164	˘
005	ì	037	%	069	E	101	e	133	½	165	•
006	í	038	&	070	F	102	f	134	F/T	176	☐
007	ô	039	'	071	G	103	g	135	←	177	Á
008	ó	040	(	072	H	104	h	136	→	178	Í
009	û	041	)	073	I	105	i	137	§	192	Ç
010	ú	042	*	074	J	106	j	138	§	193	ì
011	œ	043	+	075	K	107	k	139	◀	194	Ġ
012	Û	044	,	076	L	108	l	140	▶	195	Ş
013	ú	045	—	077	M	109	m	141	F	224	*
014	õ	046	.	078	N	110	n	142	T	225	§
015	ó	047	/	079	O	111	o	143	↓	226	Ø
016	Λ	048	0	080	P	112	p	144	ç	228	↑
017	Ψ	049	1	081	Q	113	q	145	◦	229]
018	Γ	050	2	082	R	114	r	146	ı	230	[
019	¨	051	3	083	S	115	s	147	ù	231	¨
020	Ω	052	4	084	T	116	t	148	à	232	ä
021	Δ	053	5	085	U	117	u	149	Æ	233	ö
022	Θ	054	6	086	V	118	v	150	ø	234	ü
023	Ξ	055	7	087	W	119	w	151	À	235	æ
024	π	056	8	088	X	120	x	152	⊗	236	â
025	Σ	057	9	089	Y	121	y	153	é	237	É
026	Υ	058	:	090	Z	122	z	154	è	238	ñ
027	Φ	059	;	091	Ä	123	{	155	Pt	253	DC*
028	Ů	060	<	092	Ö	124	|	156	ı		
029	Ú	061	=	093	Ü	125	}	157	Ñ		
030	Ō	062	>	094	^	126	β	158	ò		
031	Ó	063	?	095	—	127	¢	159	£		
032	(SPACE)	064	@	096	•	128	!!	160	¥		

*DC: Double Character Code

(6) Assigning departments to groups (PGM2 mode)

You can assign departments to a maximum of 14 groups.

Procedure



*AB: Dept. (+)	1 through 9 (groups 1 through 9)
Dept. (-)	10
Hash (+) dept.	11
Hash (-) dept.	12
Bottle Return (+) dept.	13
Bottle Return (-) dept.	14

Key operation

2116 . ⊗

1 ⊗

3 ST

5 ⊗

6 ST

TL

Print

#2116 %PGM2%

D01 T1 3 0.00

STEAK G03

0000003 KP- L16

D05 0.00

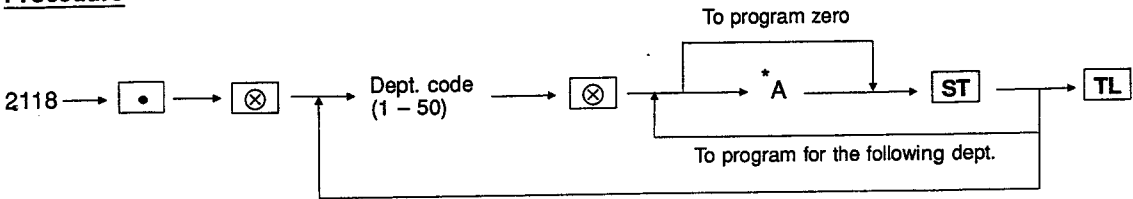
DPT.05 G06

0000001 KP- L17

(7) Assigning print stations to departments (PGM2 mode)

When you use a remote printer (kitchen printer), consult your local dealer.

Procedure



*A: To select no output, enter 0.
To select kitchen printer, enter 1.
To select receipt printer, enter 2.

Key operation

2118 • ⊗
9 ⊗ 1 ST
TL

Print

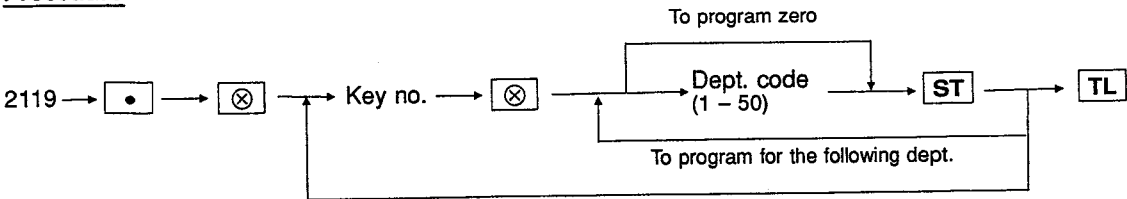
#2118 %PGM2%

D09 T 23 0.00
DPT.09 G01
0000001 KP1 L17

(8) Positioning of department keys (PGM2 mode)

Assign department codes to direct (menu) keys.

Procedure



Key operation

2119 • ⊗
1 ⊗ 1 ST
10 ⊗ 10 ST
TL

Print

#2119 %PGM2%

001 D01
010 D10

5. Programming for PLUs

A standard model is equipped with 274 PLUs.

Your machine has two kinds of PLU registration ways.

Direct PLU registration: Accomplished by depressing item key (direct PLU key) directly.

Indirect PLU registration: Accomplished by making an entry of PLU code.

Each PLU requires you to program the following.

- **PLU code (4 digits)**
- **PLU type (PLU, subdepartment, PLU/subdepartment, prohibit, or delete mode)**
 - (i) If the PLU mode (i.e. automatic preset amount entry) is selected, individual PLU entries can be made by entering the assigned code and depressing the **PLU/SUB** key (or by depressing a direct PLU key without any code entry).
 - (ii) If the subdepartment mode is selected, the entry of the assigned code and depression of the **PLU/SUB** key must then be followed by the entry of a unit price.
 - (iii) If the PLU/subdepartment mode is selected, follow up the described entries under (i) and (ii).
 - (iv) If the prohibit mode is selected, the assigned PLU and/or subdepartment code cannot be entered. This mode does not clear the PLU/subdepartment program data.
 - (v) If the delete mode is selected, data programmed for each PLU is deleted.

- **Associated department**

When a PLU is associated with a department, the following functions of the PLU depend on the programming for the department.

- (i) Grouping (group 1 through group 14)
- (ii) Single item cash sale/single item finalize
- (iii) HALO (for subdepartment only)
- (iv) Item validation print compulsory/non-compulsory

- **Unit price (max. 6 digits)**

- **Base quantity for split-pricing entries (max. 2 digit)**

- **Sign (+/-)**

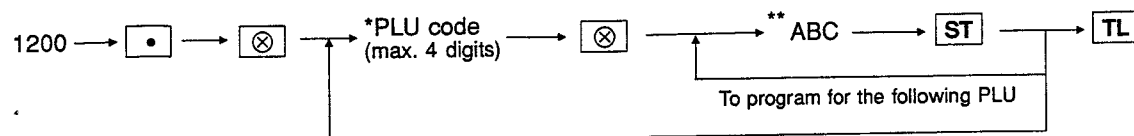
The function of every PLU/subdepartment varies according to the combination of its sign and its associated department's sign as follows.

Sign		Function of PLU/subdepartment
Dept.	PLU/subdept.	
+	+	Serves as a normal plus PLU/subdept.
-	-	Serves as a normal minus PLU/subdept.
+	-	Accepts store coupon entries, but not split-pricing
-	+	Not valid; not accepted.

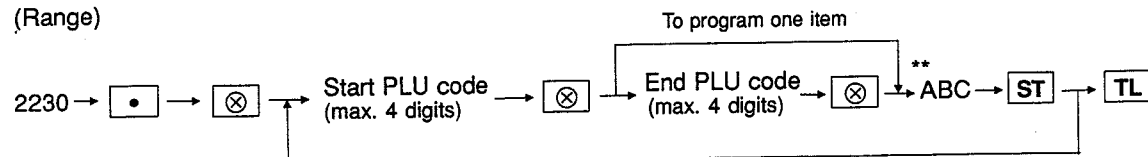
- **Tax status**
- **Item label (8 characters, option: 16 characters)**
- **Set PLU (up to 10 PLUs can be linked to each set PLU.)**
- **Link PLU (up to 5 PLUs can be tied to each link PLU.)**
- **PLU level start number**
- **Print station**
- **Positioning of direct PLU keys**
- **Stock quantity (max. 7 digits)**

(1) Definition of PLU codes and department assignment (PGM1 or PGM2 mode)

Procedure



(Range)



*PLU code: 1 through 9999 (free code)

**AB: Associated department code (01 through 50)

C: PLU type

To select the deletion mode, enter 4.

To select the PLU/subdept. mode, enter 3.

To select the PLU mode, enter 2.

To select the subdept. mode, enter 1.

To prohibit PLU/subdept., enter 0.

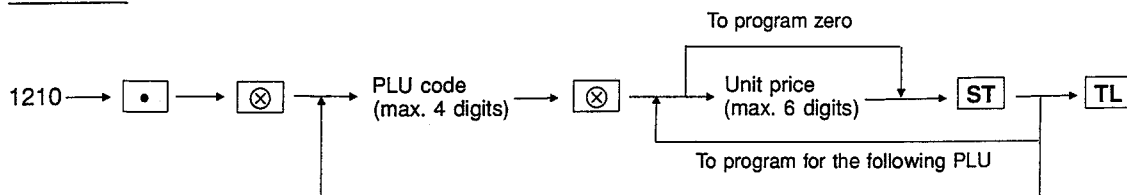
Note: Programming the PLU code 9999 automatically terminates the programming operation.

Key operation		Print
1200	[.] [⊗]	<pre>#1200 *PGM2* P0001 (05) /00 0.00 PLU0001 003 KP-</pre>
1	[⊗] 53 [ST]	
	[TL]	
(Range)		<pre>#2230 *PGM2* P0012 -P0014 2 (05)</pre>
2230	[.] [⊗]	
12	[⊗] 14 [⊗]	
	52 [ST]	
	[TL]	

(2) Programming of unit prices (PGM1 or PGM2 mode)

You can program a unit price for each PLU.

Procedure

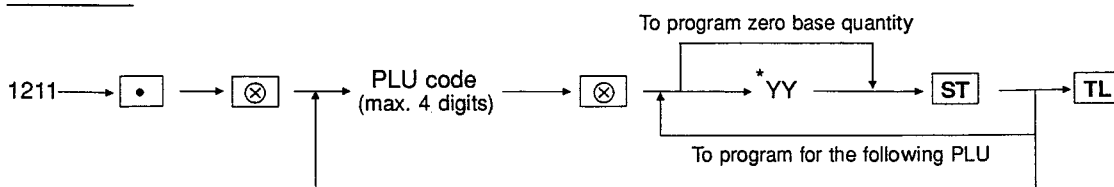


Note: When the programming for the largest one of those PLU codes defined in job #1200 is completed with depression of the **ST** key, the programming operation terminates automatically. This holds true of every programming for PLUs shown below.

Key operation	Print
1210 [.] [⊗]	#1210 *PGM2*
1 [⊗] 115 [ST]	F*0001 (05) /00
120 [ST]	1.15
[TL]	PLU0001
	003 KP-
	F*0002 (01) /00
	1.20
	PLU0002
	002 KP-

(3) Programming of base quantity (PGM1 or PGM2 mode)

Procedure



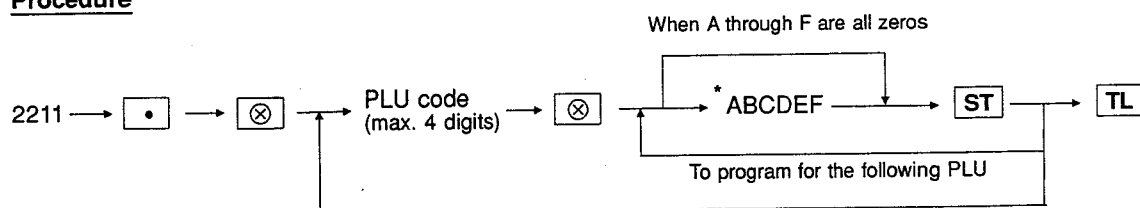
*YY: Base quantity (two digits)

Program a base quantity for each PLU/subdepartment dedicated to split-pricing entries.

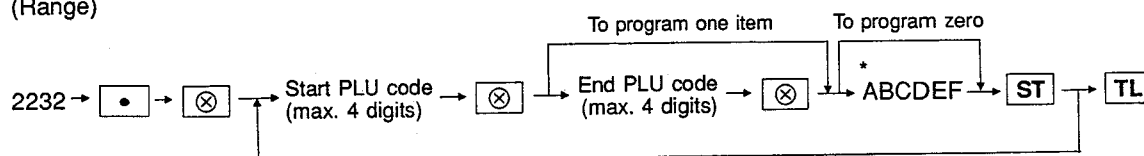
Key operation	Print
1211 • ⊗ 1 ⊗ 6 ST TL	<div style="border: 1px solid black; padding: 10px; min-height: 150px;"> <pre>#1211 *PGM2* P0001 (05) /06 1.15 PLU0001 003 KP-</pre> </div>

(4) Programming of sign and tax status (PGM2 mode)

Procedure



(Range)



*A: Sign












To set as plus PLU, enter 0, and to set as minus PLU, enter 1.

B: Not used (Enter 0.)

C, D, E and F: Tax status

Item	Tax status			Entry
	Ordinary system	Swiss system	Selection	
C	/	VAT1	YES	1
			NO	0
D	VAT3 or TAX3	TAX3	YES	1
			NO	0
E	VAT2 or TAX2	TAX2	YES	1
			NO	0
F	VAT1 or TAX1	TAX1	YES	1
			NO	0

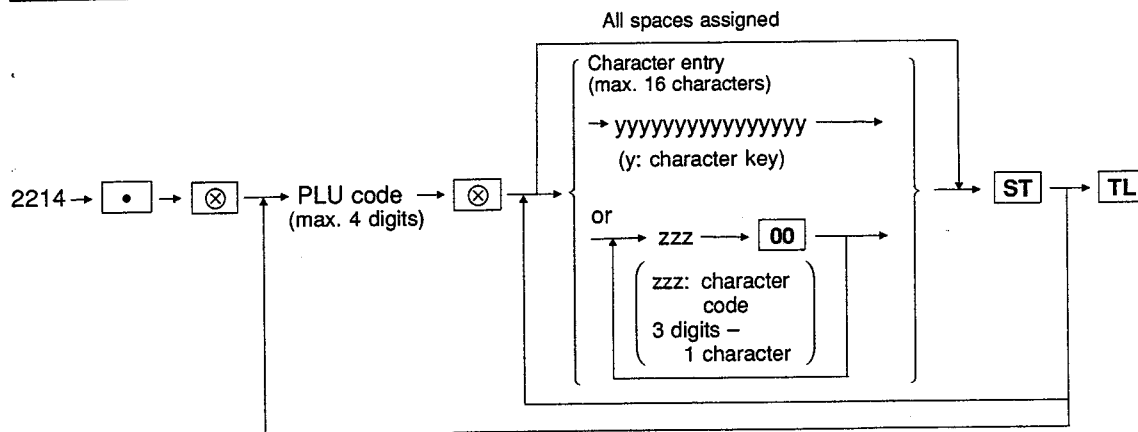
Note 3: The tax system of your machine has been factory-set to automatic VAT1 – 3. If you desire to select any of automatic tax 1 – 3, manual VAT1 – 3, manual VAT1, manual tax 1 – 3, and Swiss tax systems, contact your dealer.

Key operation		Print
2211	 	<pre>#2211 *PGM2% F0001 (05) /06 T1 1.15 PLU0001 003 KP-</pre>
1	 1 	
		
(Range)		
2232	 	<pre>#2232 *PGM2% F0012 -F0014 T1</pre>
12	 14 	
	1 	
		

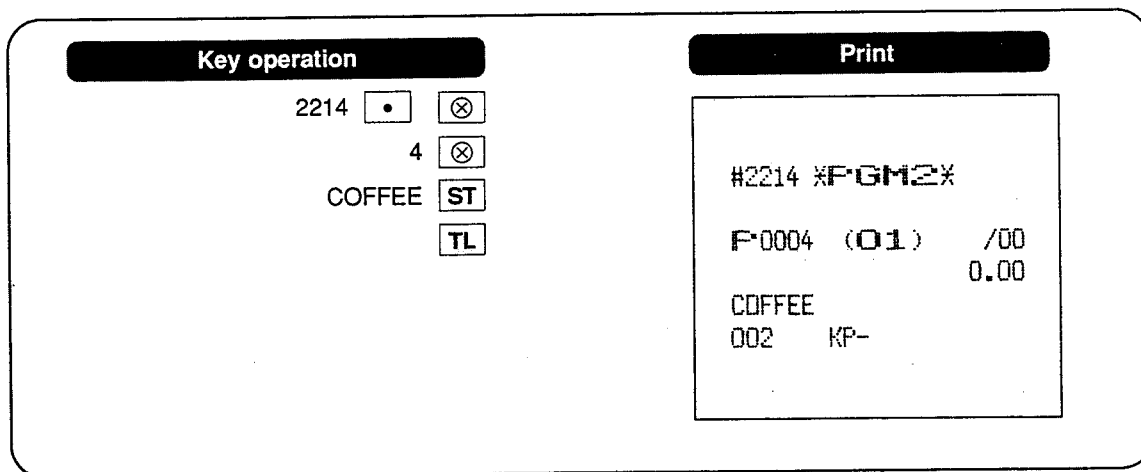
(5) Programming of PLU text (PGM2 mode)

You can program a maximum of 16 characters (standard: 8 characters, option: 16 characters) for each PLU (refer to page 17.)

Procedure



Note: If you program with character keys and you enter a wrong character, you can delete it with the **BACK (SPACE)** key. The **BACK (SPACE)** key deletes the last character.

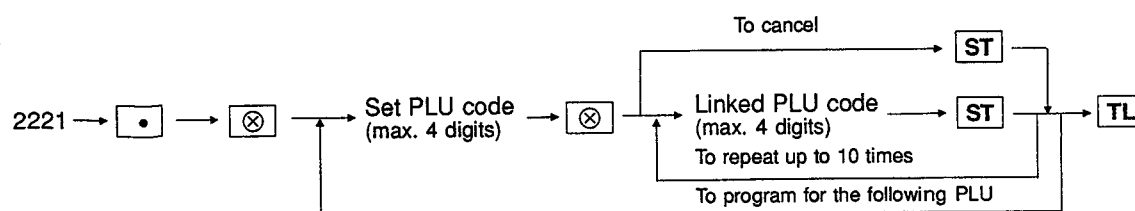


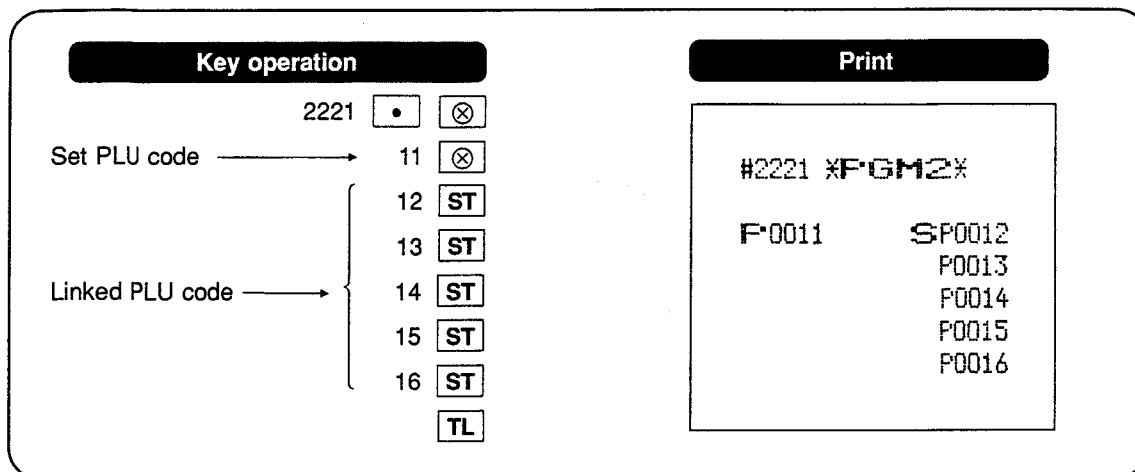
(6) Programming of set PLUs (PGM2 mode)

When two or more menu items, consisting of some PLUs, are to be programmed together, set PLUs should be specified.

Up to 10 PLUs can be linked to each set PLU.

Procedure





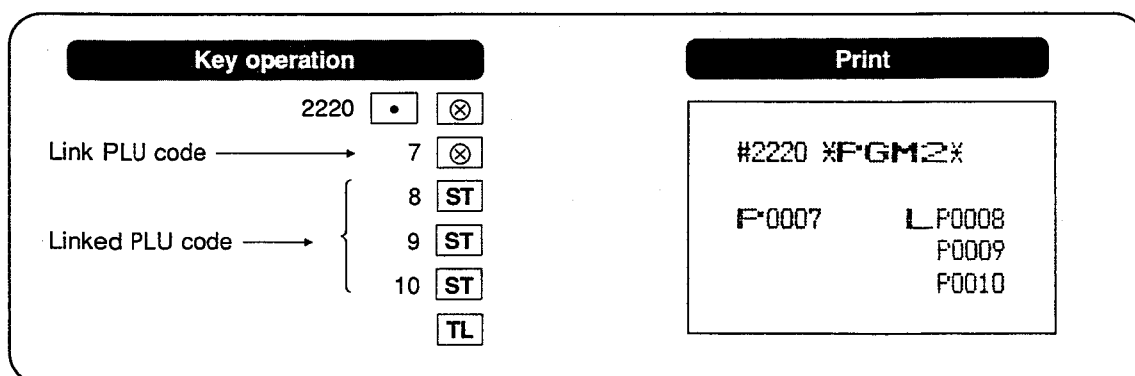
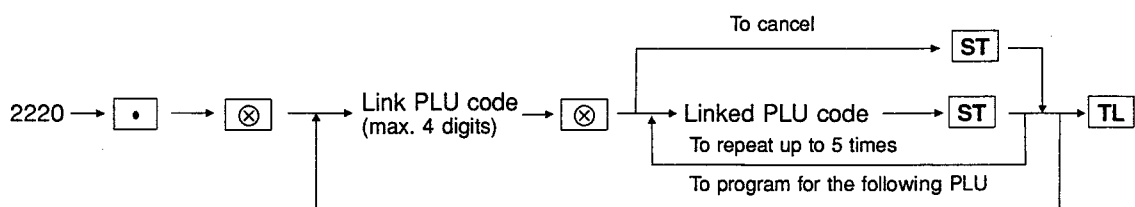
Note 1) Each linked PLU can be programmed in two or more set PLUs.

Note 2) Programming various parameters (e.g. associate dept., unit price, text...) of the set PLU is carried out the same way as for ordinary PLU.

(7) Programming of link PLUs (PGM2 mode)

PLU is able to link with any other one (e.g. to link bottle deposit). However, the link level has a maximum of 5 levels.

Procedure



Note 1) Each linked PLU can be programmed in two or more link PLUs.

Note 2) Programming various parameters (e.g. associate dept., unit price, text...) of the link PLU is carried out the same way as for ordinary PLU.

(8) Programming of PLU level shift codes (PGM2 mode)

You can program the shift PLU code for each PLU level.

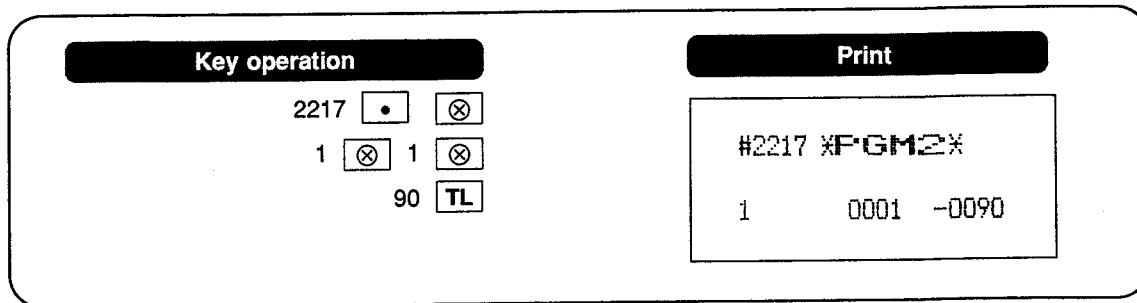
Procedure

2217 → → → * Level no. → → ** Start PLU code → → *** End PLU code →

* Level no.: 1 through 3

** Start PLU code: 1 through 9999

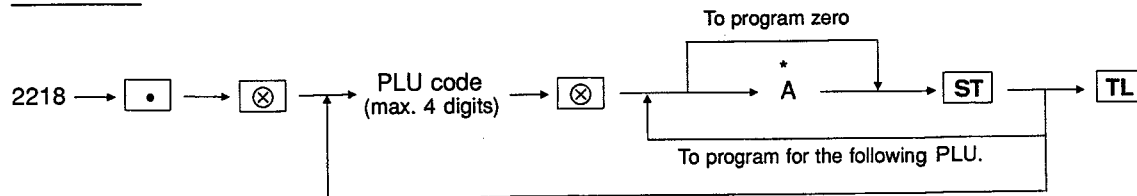
*** End PLU code: 1 through 9999



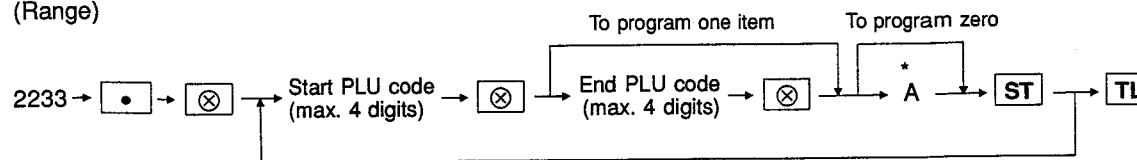
(9) Assigning print stations to PLUs (PGM2 mode)

When you use a remote printer (kitchen printer), consult your local dealer.

Procedure



(Range)



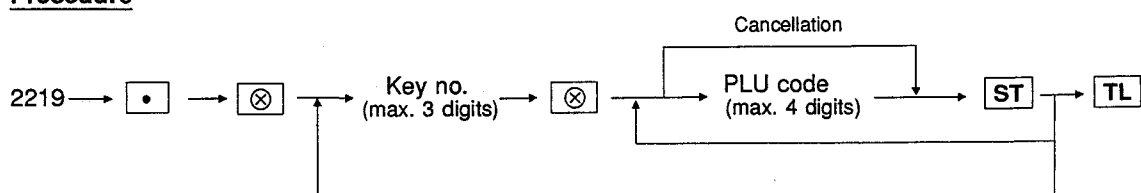
*A: To select no output, enter 0.
 To select kitchen printer, enter 1.
 To select receipt printer, enter 2.

Key operation	Print
2218 • ⊗ 7 ⊗ 2 ST TL	<pre>#2218 *PGM2* F0007 (01) L /00 0.00 PLU0007 002 RCP</pre>
(Range) 2233 • ⊗ 12 ⊗ 14 ⊗ 1 ST TL	<pre>#2233 *PGM2* F0012 -F0014 KP1</pre>

(10) Positioning of direct PLU keys (PGM2 mode)

You can assign PLU codes to fixed keys and use those keys as direct PLU keys.

Procedure

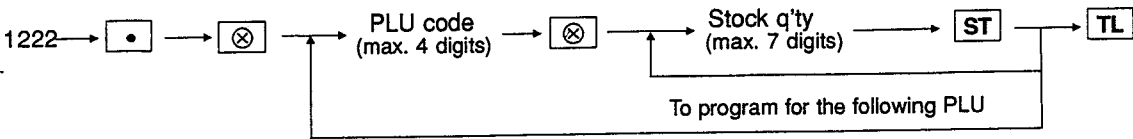


Key operation	Print
2219 • ⊗ 30 ⊗ 10 ST 35 ⊗ 15 ST TL	<pre>#2219 *PGM2* 030 F0010 035 F0015</pre>

(11) Programming of stock quantity (PGM1 or PGM2 mode)

- Assigning a new stock quantity (overwrite)

Procedure



Key operation

1222 **.** **⊗**
2 **⊗**
10000 **ST**
TL

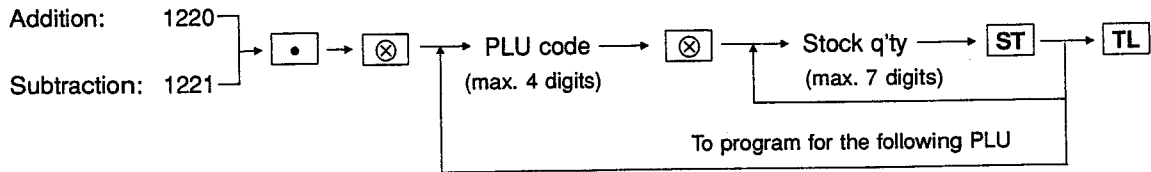
Print

#1222 *PGM2*

F0002 0.000
 10.000
S 10.000

- Adding or subtracting a stock quantity

Procedure



Adding the stock quantity

Key operation

1220 **.** **⊗**
2 **⊗**
4000 **ST**
TL

Print

#1220 *PGM2*

F0002 10.000
 4.000
S 14.000

Subtracting the stock quantity

Key operation

1221

•

⊗

2

⊗

1500

ST

TL

Print

#1221 %PGM2%

F000214.000

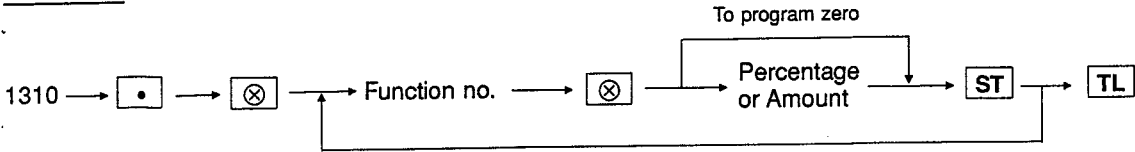
-1.500

S12.500

6. Function parameter programming

(1) Programming of deduction amount, premium and discount rate, and currency exchange rate (PGM1 or PGM2 mode)

Procedure



Function	Function no.	Percentage or Amount
⊖ 1	1	a maximum of 6 digits (0 to 999999)
⊖ 2	2	
⊖ 3	3	
⊖ 4	4	
% 1	5	a maximum of 3-digit integer + 2-digit decimal (0.00 to 100.00)
% 2	6	
% 3	7	
% 4	8	
EXCHANGE 1	51	a maximum of 4-digit integer + 4-digit decimal (0.0000 to 9999.9999)
EXCHANGE 2	52	
EXCHANGE 3	53	

Key operation

1310 . ⊗
6 ⊗
12 . 25 ST
TL

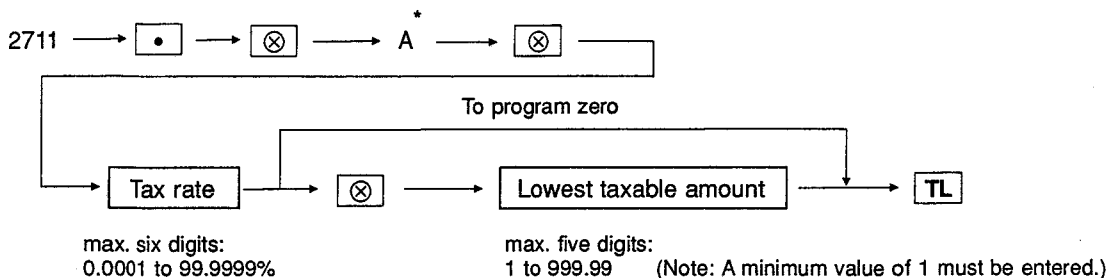
Print

#1310 *PGM2*

F006 %2
S -12.25%
L100.00%

(2) Programming of tax rate (PGM2 mode)

Procedure



*A: When you program a tax rate as tax rate 1, enter "1"; when you program it as tax rate 2, enter "2"; when you program it as tax rate 3, enter "3"; and when you program it as tax rate 4, enter "4".

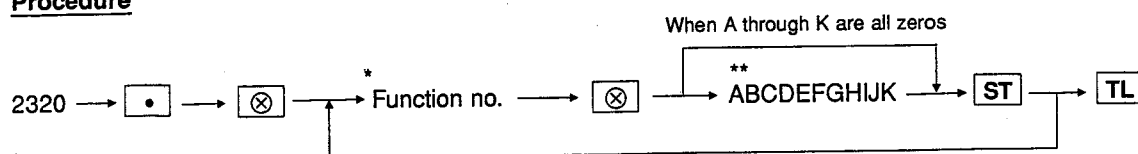
Note 1: The lowest taxable amount is valid only when you select add on tax system.
If you select VAT (value added tax) system, it is invalid.

Note 2: If you make an incorrect entry before pressing the third key in programming a tax rate, cancel it with the **CL** key; and if you make an error after pressing the third key, cancel it with the **ST** key. Then program again from the beginning correctly.

Key operation	Print
2711	<pre> #2711 *PGM2* TAX2 7.0000% 0.12 </pre>
2	
7	
12	

(3) Function programming for the finalization keys (PGM2 mode)

Procedure



* Function no.:

CASH = 40	CREDIT1 = 43	CREDIT5 = 47
CASH2 = 41	CREDIT2 = 44	CREDIT6 = 48
CHEQUE = 42	CREDIT3 = 45	CREDIT7 = 49
	CREDIT4 = 46	CREDIT8 = 50

** A: Slip printing compulsory/non-compulsory = 1/0

B: Footer printing enable/disable = 1/0

C: Non-add code entry compulsory/non-compulsory = 1/0

D: Change disable/enable = 1/0

E: Validation printing compulsory/non-compulsory = 1/0

F: Not used (Enter 0.)

G: Not used (Enter 0.)

H: Not used (Enter 0.)

I: Not used (Enter 0.)

J: Drawer opening disable/enable = 1/0

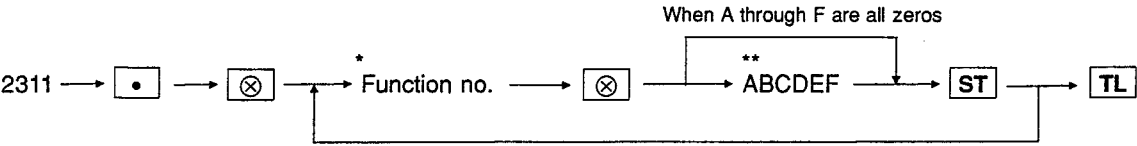
K: Tendering compulsory/non-compulsory (for CASH, CASH2, and CHEQUE)= 1/0

compulsory/prohibit (for CREDIT1 to CREDIT8) = 1/0

Key operation	Print
2320 . ⊗ 40 ⊗ ST 43 ⊗ 10000010 ST TL	<pre> #2320 *PGM2* F040 CASH L18 0000000000 F043 CREDIT1 L18 00010000010 </pre>

(4) Programming of sign (for %, ⊖) (PGM2 mode)

Procedure



- * Function no.:
- | | |
|---------|--------|
| ⊖ 1 = 1 | %1 = 5 |
| ⊖ 2 = 2 | %2 = 6 |
| ⊖ 3 = 3 | %3 = 7 |
| ⊖ 4 = 4 | %4 = 8 |

** A: Sign -/+ = 1/0
B, C, D, E, and F: Not used (Enter 0 for B, C, D, E, and F.)

Key operation

2311 ⊙ ⊗
5 ⊗
100000 ST
TL

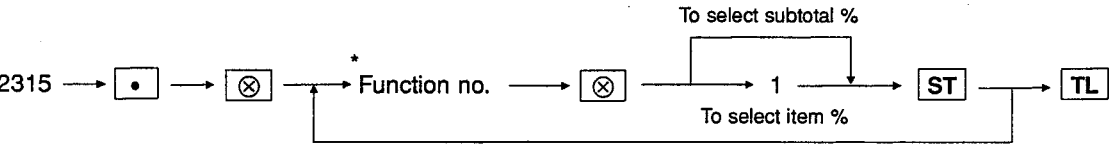
Print

#2311 %PGM2%

F005 %1
S -0.00%
L100.00%

(5) Item % or subtotal % selection (PGM2 mode)

Procedure

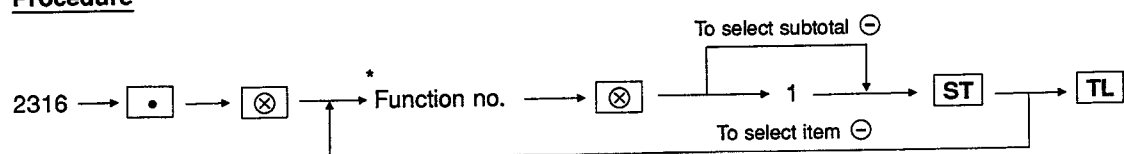


- * Function no.:
- | | | | |
|--------|--------|--------|--------|
| %1 = 5 | %2 = 6 | %3 = 7 | %4 = 8 |
|--------|--------|--------|--------|

Key operation	Print
2315 . ⊗ 5 ⊗ 1 ST TL	<pre>#2315 *PGM2% F005 %1 I -0.00% L100.00%</pre>

(6) Item ⊖ or subtotal ⊖ selection (PGM2 mode)

Procedure



* Function no.:

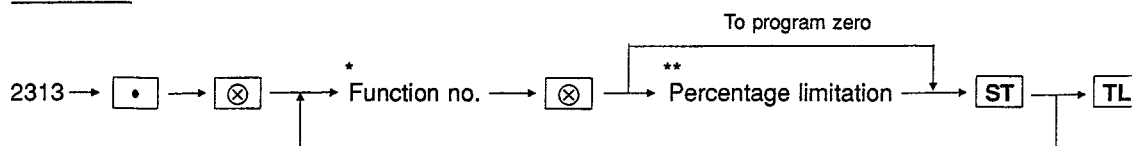
⊖ 1 = 1 ⊖ 2 = 2 ⊖ 3 = 3 ⊖ 4 = 4

Key operation	Print
2316 . ⊗ 1 ⊗ 1 ST TL	<pre>#2316 *PGM2% F001 (-) 1 I -0.00 L17</pre>

(7) Programming of HALO for percent calculation (PGM2 mode)

Your machine allows you to program the upper limit for percent calculation.

Procedure



* Function no.:

%1 = 5 %2 = 6 %3 = 7 %4 = 8

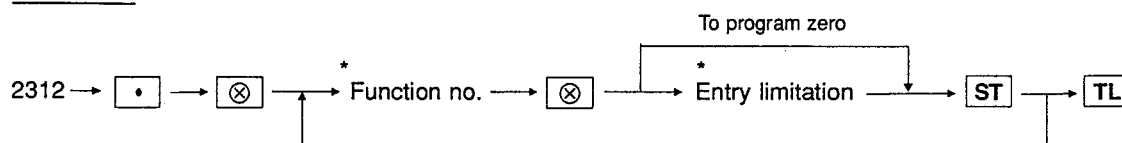
** Percentage limitation: 0.00 through 100.00

Key operation	Print
2313 [.] [⊗] 5 [⊗] 20 [ST] [TL]	<div style="border: 1px solid black; padding: 10px; margin: 5px;"> <pre> #2313 XPGM2X F005 %1 I -0.00% L 20.00% </pre> </div>

(8) Programming of HALO for deduction, received on account, and paid out (PGM2 mode)

Your machine allows you to program the upper limit for deduction, received on account, and paid out.

Procedure



*

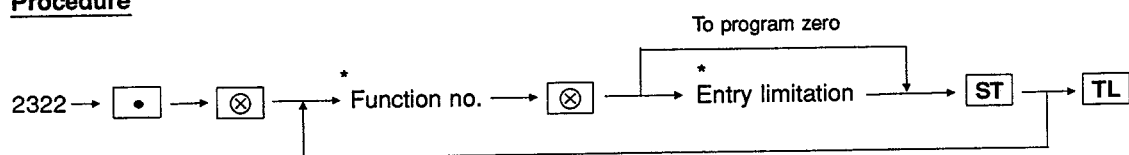
Function	Function no.	Entry limitation
⊖1	1	2 digits (AB) AB is the same as $A \times 10^B$ A: Significant digit (1 through 9) B: 0 through 7
⊖2	2	
⊖3	3	
⊖4	4	
RA	35	2 digits (AB) AB is the same as $A \times 10^B$ A: Significant digit (1 through 9) B: 0 through 8
RA2	36	
PO	37	
PO2	38	

Key operation	Print
2312 • ⊗ 1 ⊗ 16 ST TL	<pre>#2312 *PGM2* F001 (-) 1 I -0.00 L16</pre>

(9) Programming of HALO for finalization keys (PGM2 mode)

Your machine allows you to program the upper limit for the finalization keys.

Procedure



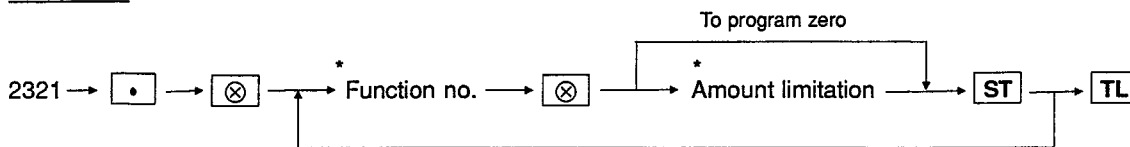
Function	Function no.	Entry limitation
CASH	40	2 digits (AB) AB is the same as $A \times 10^B$ A: Significant digit (1 through 9) B: 0 through 8
CASH2	41	
CHECK	42	
CREDIT 1	43	
CREDIT 2	44	
CREDIT 3	45	
CREDIT 4	46	
CREDIT 5	47	
CREDIT 6	48	
CREDIT 7	49	
CREDIT 8	50	

Key operation	Print
2322 • ⊗ 44 ⊗ 15 ST TL	<pre>#2322 *PGM2* F044 CREDIT2 L15 0000000000</pre>

(10) Programming of HALO for cash in drawer, cheque change, and cheque cashing (PGM2 mode)

Your machine allows you to program the upper limit for cash in drawer, cheque change, and cheque cashing.

Procedure

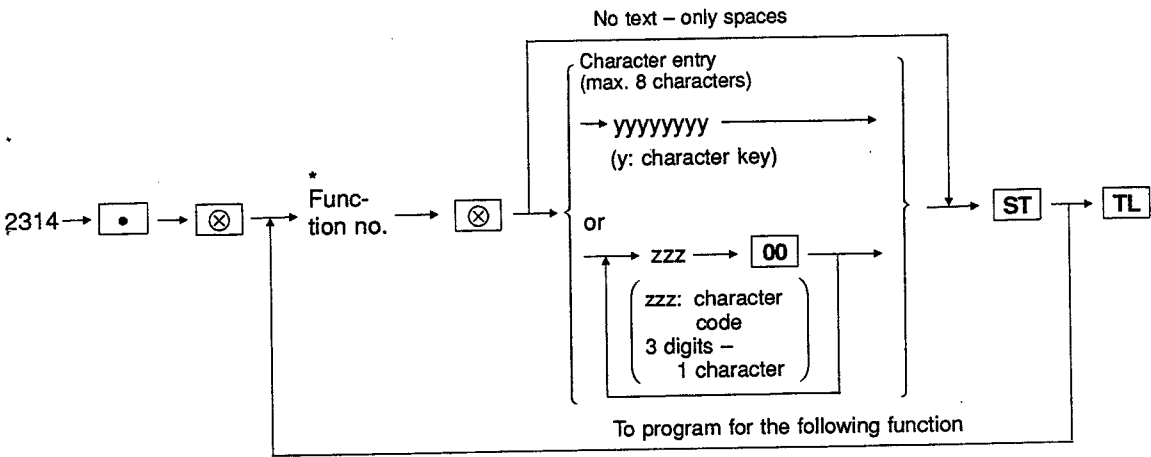


Function	Function no.	Amount limitation
CID (sentinel amount)	58	max. 9 digits 0.00 through 9999999.99
Cheque change	61	max. 8 digits 0.00 through 999999.99
Cheque cashing	39	

Key operation	Print
2321 . ⊗ 39 ⊗ 9999 ST TL	<div style="border: 1px solid black; padding: 10px;"> <p>#2321 XPGM2X</p> <p>F039 CA/CHK 99.99</p> </div>

(11) Programming of function text (PGM2 mode)

Procedure



* Function no.: See "LIST OF FUNCTION TEXTS" shown on the next page.

Note: If you program with character keys and you enter a wrong character, you can delete it with the **(BACK SPACE)** key. The **(BACK SPACE)** key deletes the last character.

Key operation	Print
2314 • ⊗	#2314 *PGM2*
40 ⊗	F040 CASH L18
(DC) CASH ST	000000000000
TL	

LIST OF FUNCTION TEXTS

Function no.	Function	Default text
1	⊖ 1	(→) 1
2	⊖ 2	(→) 2
3	⊖ 3	(→) 3
4	⊖ 4	(→) 4
5	% 1	% 1
6	% 2	% 2
7	% 3	% 3
8	% 4	% 4
9	SET PLU DISCOUNT	SET PLU -
10	DIFFER	DIFFER
11	TAXABLE 1 SUBTOTAL	TAX1 ST
12	TAXABLE 2 SUBTOTAL	TAX2 ST
13	TAXABLE 3 SUBTOTAL	TAX3 ST
14	TAXABLE SUBTOTAL	TAX ST
15	VAT/TAX 1	VAT 1
16	VAT/TAX 2	VAT 2
17	VAT/TAX 3	VAT 3
18	VAT/TAX	VAT
19	NET 1	NET 1
20	NET 2	NET 2
21	COUPON-LIKE PLU	CP PLU
22	REFUND	REFUND
23	∞	∞
24	∞ MODE TOTAL	∞ MODE
25	MGR ∞	MGR ∞
26	SUBTOTAL ∞	SBTL ∞
27	HASH ∞	HASH ∞
28	HASH REFUND	HASH RF
29	VP COUNTER	VP CNT
30	SLIP COUNTER	SLIP CNT
31	NO SALE	NO SALE
32	GUEST CHECK COUNTER	G. C. CNT
33	PBAL	***PBAL
34	NBAL	***NBAL
35	RA	***RA

Function no.	Function	Default text
36	RA2	***RA2
37	PO	***PO
38	PO2	***PO2
39	CHEQUE CASHING	CA/CHK
40	CASH	CASH
41	CASH 2	CASH2
42	CHECK	CHECK
43	CREDIT 1	CREDIT1
44	CREDIT 2	CREDIT2
45	CREDIT 3	CREDIT3
46	CREDIT 4	CREDIT4
47	CREDIT 5	CREDIT5
48	CREDIT 6	CREDIT6
49	CREDIT 7	CREDIT7
50	CREDIT 8	CREDIT8
51	EXCHANGE 1	EXCH1
52	EXCHANGE 2	EXCH2
53	EXCHANGE 3	EXCH3
54	EXCHANGE 4	EXCH4
55	EXCHANGE 1 IS	EXCH1 IS
56	EXCHANGE 2 IS	EXCH2 IS
57	EXCHANGE 3 IS	EXCH3 IS
58	CASH IN DRAWER	***CID
59	CASH/CHEQUE IS	CA/CH IS
60	CASH/CHEQUE IN DRAWER	CA/CH ID
61	CHEQUE/CHANGE	CHK/CG
62	GUEST	GUEST
63	ORDER TOTAL	ORDER TL
64	PAID TOTAL	PAID TL
65	DOMESTIC CURRENCY 1	DOM.CUR1
66	DOMESTIC CURRENCY 2	DOM.CUR2
67	DOMESTIC CURRENCY 3	DOM.CUR3
68	DOMESTIC CURRENCY 4	DOM.CUR4
69	CHEQUE IN DRAWER	*CH ID
70	(+)DEPT TTL	*DEPT TL
71	(-)DEPT TTL	DEPT (-)

Function no.	Function	Default text
72	BOTTLE DEPOSIT TTL	*BTTL TL
73	BOTTLE RETURN TTL	BTTL (-)
74	HASH(+) TTL	*HASH TL
75	HASH(-) TTL	HASH (-)
76	NET 1(TAXABLE 1-VAT 1)	NET 1
77	NET 2(TAXABLE 2-VAT 2)	NET 2
78	NET 3(TAXABLE 3-VAT 3)	NET 3
79	NET (TAXABLE -VAT)	NET
80	SUBTOTAL	SUBTOTAL
81	MDS SUBTOTAL	MDSE ST
82	TOTAL	***TOTAL
83	CHANGE	CHANGE
84	BALANCE	BALANCE
85	SALES Q'TY	ITEMS
86	PLU ST	PLU ST
87	COPY RECEIPT TITLE	COPY
88	GUEST CHECK COPY TITLE	G.C COPY
89	SLIP PRINT JOURNAL MESSAGE	SLIP PR.
90	SLIP NEXT PAGE	NEXT P.
91	AVERAGE	AVE.
92	GROUP1	G ROUP1
93	GROUP2	G ROUP2
94	GROUP3	G ROUP3
95	GROUP4	G ROUP4
96	GROUP5	G ROUP5
97	GROUP6	G ROUP6
98	GROUP7	G ROUP7
99	GROUP8	G ROUP8
100	GROUP9	G ROUP9
101	CCD	CCD
102	CCD DIFFER	CCD DIF.
103	CCD DIFFER TOTAL	DIF. TL
104	ORDER TOTAL-PAID TOTAL	O - P
105	DEPT REPORT TITLE	DEPT
106	GROUP REPORT TITLE	GROUP
107	PLU REPORT TITLE	PLU

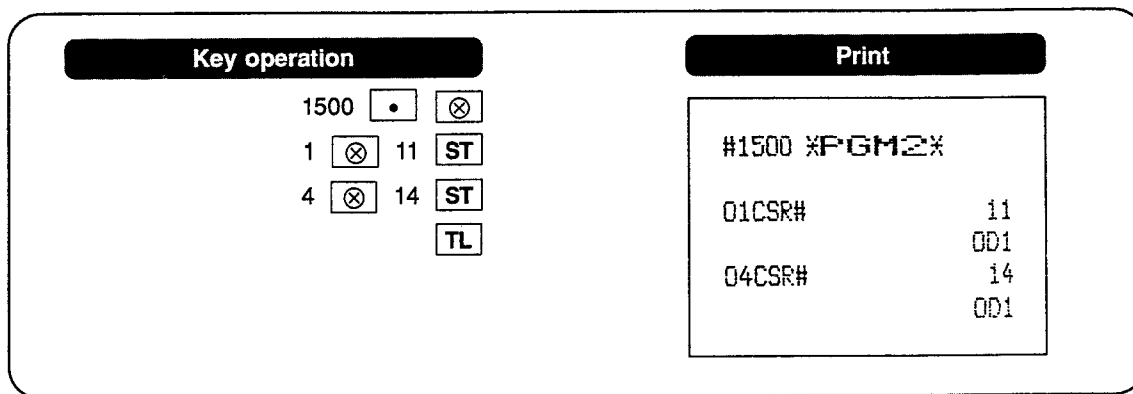
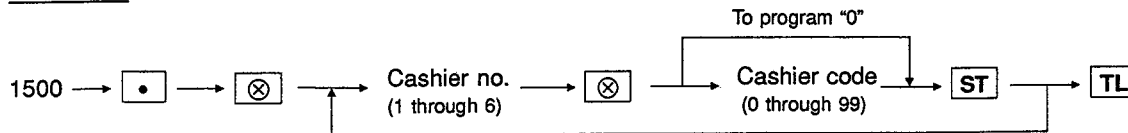
Function no.	Function	Default text
108	STOCK REPORT TITLE	STOCK
109	TRANSACTION REPORT TITLE	TRANS.
110	CID REPORT TITLE	TL-ID
111	CASHIER REPORT TITLE	CASHIER
112	HOURLY REPORT TITLE	HOURLY
113	DAILY NET REPORT TITLE	DAILY
114	SET PLU REPORT TITLE	SET PLU
115	TOTAL TAX	TTL TAX
116	NET WITHOUT TAX	NET
117	TOWN NAME 1	TOWNNAME
118	TOWN NAME 2	TOWNNAME

7. Cashier programming

(1) Cashier code definition (PGM1 or PGM2 mode)

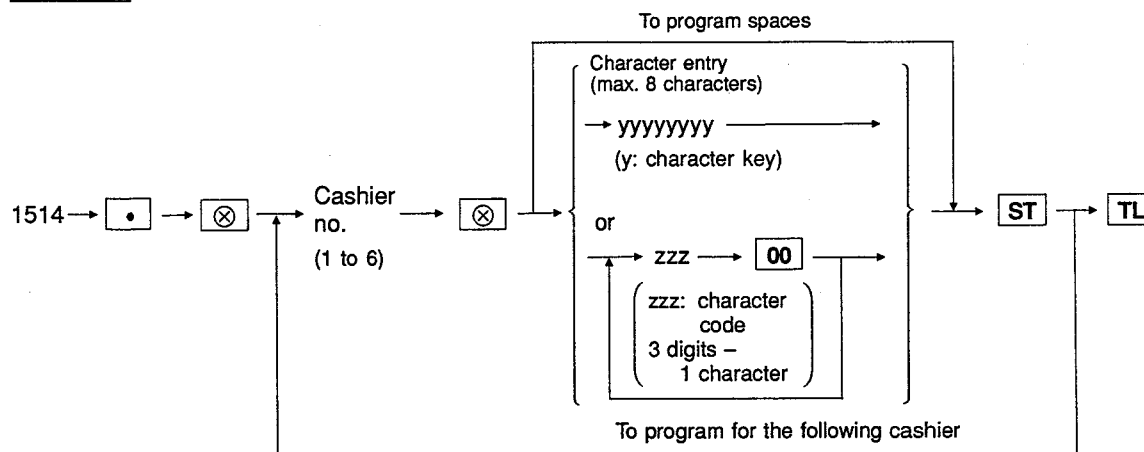
You can assign a cashier code to each 6 cashier keys (standard: 4 cashier keys).

Procedure



(2) Programming of the cashier name (PGM1 or PGM2 mode)

Procedure



Note: If you program with character keys and you enter a wrong character, you can delete it with the

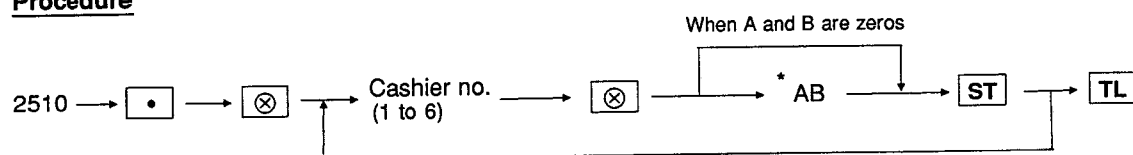
[BACK SPACE] key. The **[BACK SPACE]** key deletes the last character.

Key operation	Print
1514 • ⊗ 1 ⊗ MEYER ST TL	<pre>#1514 *PGM2* 01CSR# 11 MEYER 0D1</pre>

(3) Functional programming to cashiers (PGM2 mode)

You can program functions A and B to individual cashiers.

Procedure



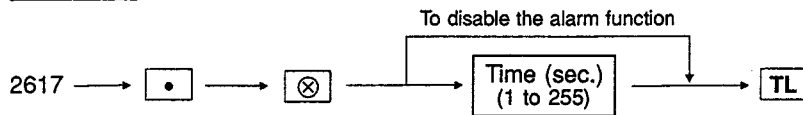
Item	Function	Selection	Enter
A	Guest check copy	Disable	1
		Enable	0
B	Drawer no.	Drawer 1-4/no use	1-4/0

Key operation	Print
2510 • ⊗ 1 ⊗ 11 ST TL	<pre>#2510 *PGM2* 01CSR# 11 MEYER 1D1</pre>

8. Programming alarm length of time with drawer opening (PGM2 mode)

If the drawer still remains open when a specified length of time has elapsed, your machine gives the alarm.

Procedure

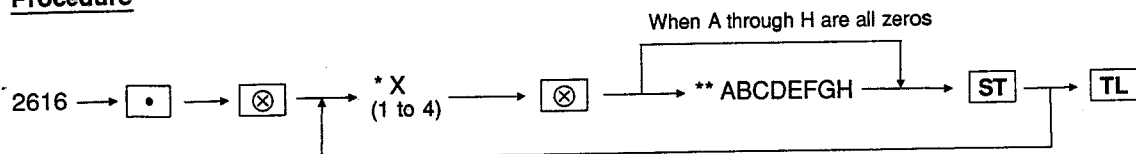


Key operation	Print
2617 [•] [⊗]	#2617 *PGM2*
30 [TL]	
	030

Note: Your machine starts to monitor how long the drawer is kept open the moment the drawer is opened at the end of a transaction in the REG/VOID mode. It stops the time monitoring when a valid key (except the VP and RCPT, SLIP keys) is pressed for the next transaction. It restarts the time monitoring after that transaction is ended. You can stop the buzzer alarm by closing the drawer. No key entries can be made while the buzzer is sounding.

9. Programming for optional feature selection (PGM2 mode)

Procedure



* When X is 1:

**

Item	Description		Entry
A	OP X/Z report	Enable	0
		Disable	1
B	Paid out in the REG mode	Enable	0
		Disable	1
D	Refund in the REG mode	Enable	0
		Disable	1
E	Direct void in the REG mode	Enable	0
		Disable	1
F	Indirect void in the REG mode	Enable	0
		Disable	1
G	Subtotal void in the REG mode	Enable	0
		Disable	1
H	Refund validation printing	Non-compulsory	0
		Compulsory	1

C: Not used (Enter 0.)

* When X is 2:

**

Item	Description	Entry
A	The first item direct void	Enable
		0
B	PLU level shift mode*	Disable
		1
C	Mode switch position for PLU level shift	Automatic return mode
		0
D	Printing of the number of purchased items	Lock shift mode
		1
E	Time printing	REG and MGR
		0
F	Journal print form	MGR
		1
G	Item validation printing	No
		0
H	⊖ validation printing	Yes
		1
I		Yes
		0
J		No
		1
K		Detailed
		0
L		Limited**
		1
M		Enable
		0
N		Disable
		1
O		Non-compulsory
		0
P		Compulsory
		1

*Note 1: Automatic return mode: The price/level status is once changed when the shift key has been pressed and is then resumed.

Lock shift mode: The price/level status stays unchanged until the shift key is pressed again.

**Note 2: When 1 is entered ("limited" is selected), plus (+) department and plus (+) PLU/sub-dept. are not printed.

* When X is 3:

**

Item	Description	Entry
C	Zero skip in cashier report	Yes
		0
D	Zero skip in transaction report	No
		1
E	Zero skip in department report	Yes
		0
F	Zero skip in PLU report	No
		1
G	Zero skip in hourly report	Yes
		0
H	Zero skip in daily net report	No
		1

A and B: Not used (Enter 0 or nothing for A and B.)

* When X is 4:

**

Item	Description	Entry
C	VAT amount printing on the receipt	Yes 0
		No 1
D	Taxable amount printing on the receipt	Yes 0
		No 1
E	Net amount printing on the receipt	Yes 0
		No 1
H	Way to return PLU level (when you select automatic return mode for PLU level shift mode)	each item 0
		each transaction 1

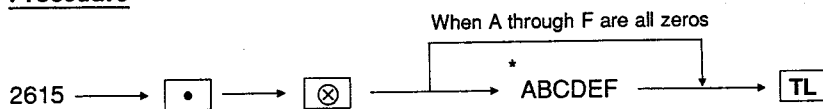
A and B: Not used (Enter 0 or nothing for A and B.)

F and G: Not used (Enter 0 for F and G.)

Key operation	Print
2616 <input type="button" value="."/> <input type="button" value="X"/> 3 <input type="button" value="X"/> 1000 <input type="button" value="ST"/> <input type="button" value="TL"/>	<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> #2616 *PGM2* 3 00001000 </div>

10. Programming of validation printing and slip printing (PGM2 mode)

Procedure



- *
 AB: Slip feed lines (0 through 64 lines)
 CD: Maximum number of slip print lines (0 through 99 lines)
 E: Validation printing counter (1 through 9 times)
 To inhibit validation printing, enter 0.
 F: Not used (Enter 0.)

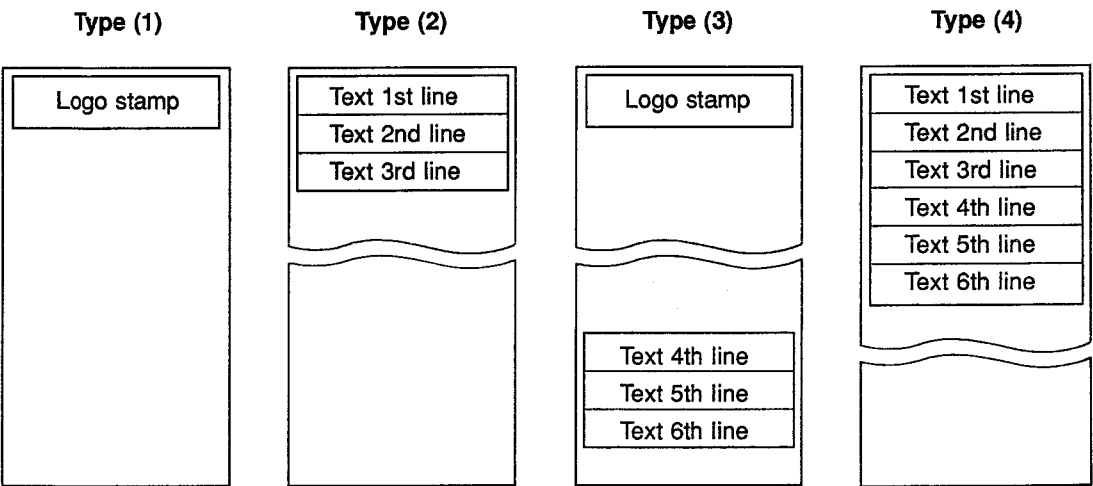
Key operation	Print
2615 <input type="button" value="."/> <input type="button" value="X"/> 10 <input type="button" value="TL"/>	<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> #2615 *PGM2* 00 00 1 0 </div>

11. Logo text programming (PGM2 mode)

Your machine can print logo messages in the following four manners. The standard model provides no message line; it allows stamping only. If you need the printing of programmed messages, please consult your dealer.

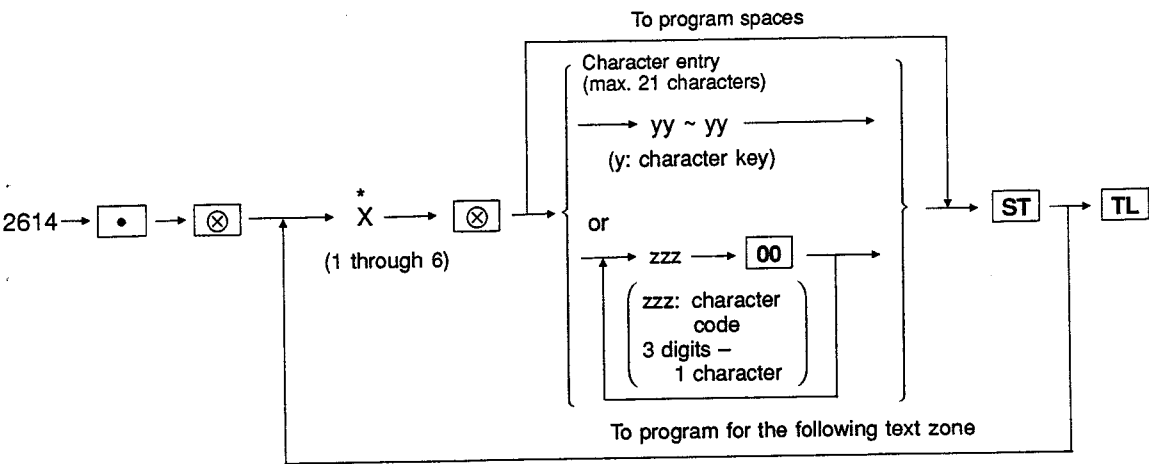
- (1) No logo message printed (logo stamp only)
- (2) 3-line logo message (header) instead of logo stamp
- (3) 3-line logo message (footer) and logo stamp
- (4) 6-line logo message (header) instead of logo stamp

Print positions on the receipt



Note) Up to 21 characters can be programmed per line.

Procedure



*X: Line number for logo message (1 through 6)

Note: If you program with character keys and you enter a wrong character, you can delete it with the **(BACK SPACE)** key. The **(BACK SPACE)** key deletes the last character.

Key operation

2614 . ⊗

4 ⊗

* * * * *

E S T A U R A

N T * * * *

ST

5 ⊗

* * * * *

S (DC) H (DC) A (DC) R

(DC) P * * * *

ST

TL

Print

#2614 *PGM2*

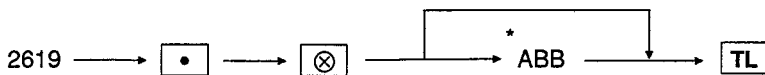
*****RESTAURANT*****

*****SHARP*****

12. Programming of hourly report (PGM2 mode)

You can program the sales consolidation start time. The consolidation termination time must be one minute before the next consolidation start time.

Procedure



*A: Memory type 15 minutes (12-hour system)/
30 minutes (24-hour system) = 1/0
BB: Consolidation start time 00 through 23

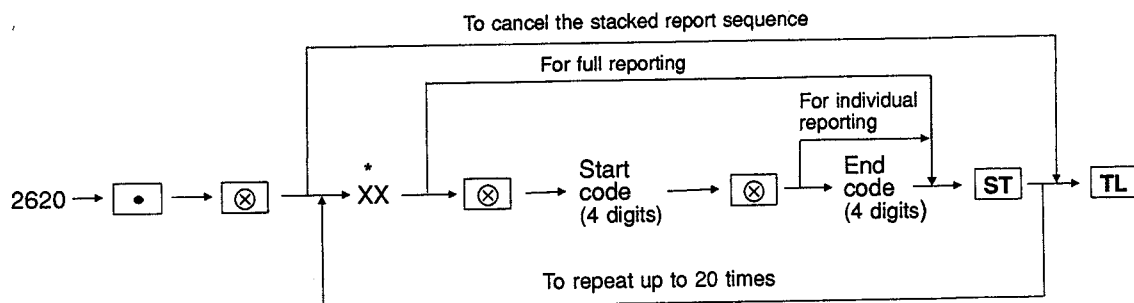
Key operation	Print
2619 [•] [⊗]	#2619 *PGM2*
11 [TL]		0 11

- Reprogramming cannot be done unless resetting is taken once.

13. Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence (PGM2 mode)

Your register is equipped with the stacked report printing function that enables multiple X/Z reports to be printed in sequence with only a single request, up to 20 reports. This function continuously prints a maximum of 20 kinds of reports with a single operation.

Procedure



*: Maximum 70 steps are programmable. "1 step" means the memory size used for one no-range type job no. The range type job no. needs "6 steps".

* XX: Report job number

Job no.	Report	Start code and End code
00	General report	
10	Full department report	
13	Full department group report	
20	Range PLU report	Start PLU no./end PLU no. (1 through 9999)
24	PLU stock report	Start PLU no./end PLU no. (1 through 9999)
30	Transaction report	
31	Cash in drawer report	
50	Full cashier report	
60	Hourly sales information	Start time/end time (0 through 2330 or 2345)
70	Daily net report	

For inline operation (option)

Job no.	Report	Start code and End code
05	General report	
15	Department report	
18	Full department group report	
25	Range PLU report	Start PLU no./end PLU no. (1 through 9999)
29	PLU stock report	Start PLU no./end PLU no. (1 through 9999)
35	Transaction report	
36	Cash in drawer report	
55	Full cashier report	
65	Hourly sales information	Start time/end time (0 through 2330 or 2345)
75	Daily net report	

Key operation

2620 ☐ ☐

10 ☐ ST

13 ☐ ST

☐ TL

Print

#2620 XPGM2X

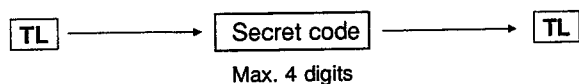
10

13

14. Secret codes to control access to PGM1 mode, and Z1 and Z2 reports (PGM2 mode)

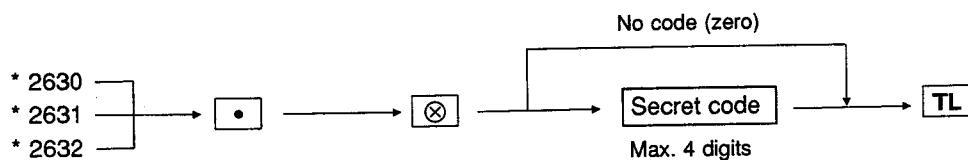
- When changing stored programs in the PGM1 mode, those operations are inhibited if no secret code is entered.
- If a secret code has not been entered yet, any X1/Z1-mode or X2/Z2-mode operation cannot be performed.
- You must enter a secret code according to the following procedure before performing any PGM1-mode, X1/Z1-mode or X2/Z2-mode operation.

Procedure

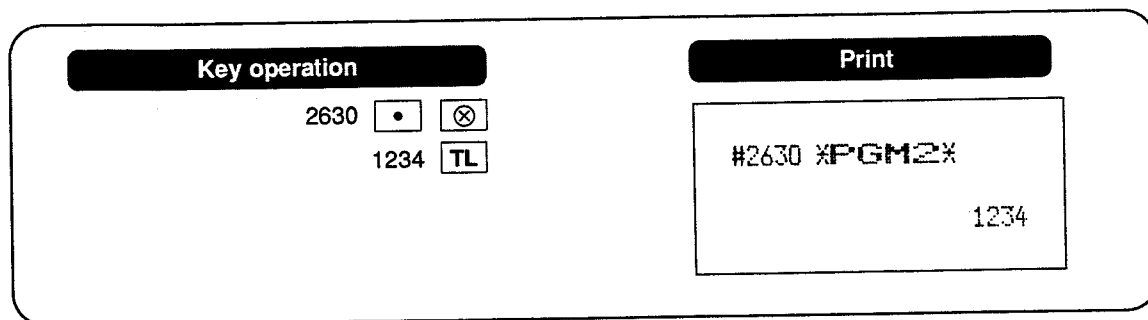


Note: Once a secret code is entered, it does not need to be entered again unless the mode switch setting is changed and any operation, such as a sales registration, reporting, or programming, is performed.

Procedure



* : 2630 for PGM1 mode
 2631 for X1/Z1 mode
 2632 for X2/Z2 mode



15. Reading stored programs

Your machine allows you to read every program stored in the PGM1 and PGM2 modes.

(1) Program details and procedures for their reading

Program for:	Mode switch position	Job code no.	Procedure	Related job code nos.
① Departments	PGM2 or PGM1	1100		1110, 2110, 2111, 2112, 2114, 2116, 2118
② PLUs/ subdepartments	PGM2 or PGM1	1200		1200, 1210, 1211, 1220, 1221, 1222, 2211, 2214, 2218, 2220, 2221, 2230, 2232, 2233
③ Cashiers	PGM2 or PGM1	1500		1500, 1514, 2510
④ Set PLUs	PGM2	2221		2221
⑤ Link PLU	PGM2	2220		2220
⑥ Level range	PGM2	2217		2217
⑦ Miscellaneous presets	PGM2 or PGM1	2600		2614, 2615, 2616, 2617, 2619, 2620, 2630, 2631, 2632
⑧ Function preset	PGM2 or PGM1	1300		1310, 2311, 2312, 2313, 2314, 2315, 2316, 2320, 2321, 2322
⑨ Tax rate	PGM2	2700		2711
⑩ Dept. and PLU codes for direct keys	PGM2	2119		2119, 2219
⑪ Auto key preset	PGM2	2900		2900

(2) Sample printouts

- ① Reading of programmed items for departments
(Reading in the PGM1 and PGM2 modes)

YOUR RECEIPT		
THANK YOU		
21/09/93 10:06 11-1		
123456#1057 MEYER		
#1100 XPGM2X		
D01 T1 3	20.00	Dept. code/taxability/unit price
STEAK	G03	Text/group
0000003 RCP	L16	Print station/HALO
D02 T1	6.30	
DPT.02	G01	
0000103 KP-	L17	
D03	47.00	
DPT.03	G01	
0000003 KP-	L17	
D04 T 2	15.00	
DPT.04	G01	
0000002 KP-	L15	
D05 T 3	0.00	
DPT.05	G06	
0000001 KP1	L17	
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">0000003</div> <div style="margin-left: 10px;"> Type of unit price entry SIF/SICS/Normal Item validation print Compulsory/Non-compulsory </div>		
D19	2.00	
DPT.19	G01	
0100003 KP-	L17	
D20	-1.50	Minus dept.
DPT.20	G10	
0000003 KP-	L17	

- ② Reading of programmed items for PLUs/subdepartments
(Reading in the PGM1 and PGM2 modes)

YOUR RECEIPT	
THANK YOU	
21/09/93 10:27 11-1	
123456#1073 MEYER	
#1200 *PGM2*	
P0001 (05) /06	PLU code/associate dept./base q'ty
T1 1.15	Taxability/unit price
PLU0001	Text
003 KP- S 7.500	Print station/stock
P0002 (01) /00	Type of unit price entry
1.20	
PLU0002	
003 KP1 S 12.500	
P0003 (01) /00	
T 2 0.00	
PLU0003	
002 RCP S 8.800	
P0004 (03) /00	
T 3 0.00	
COFFEE	
003 KP- S 0.000	

P0089 (04) L /00	Link PLU
0.00	
PLU0089	
001 KP- S 1.550	
P0090 (08) S /00	Set PLU
2.50	
PLU0090	
002 KP- S 0.000	

- ③ Reading of programmed items for cashiers
(Reading in the PGM1 and PGM2 modes)

YOUR RECEIPT	
THANK YOU	
21/09/93 10:29 11-1	
123456#1074 MEVER	
#1500 XPGM2X	
01CSR#	11
MEVER	101
02CSR#	02
	001
03CSR#	03
	001
04CSR#	14
	001

Cashier code

Cashier name/G.C. copy/ drawer no.

- ④ Reading of programmed set PLUs
(Reading in the PGM2 mode)

YOUR RECEIPT	
THANK YOU	
21/09/93 10:30 11-1	
123456#1075 MEYER	
#2221 *PGM2*	
F0011	SP0012
	P0013
	P0014
	P0015
	P0016

Set PLU/linked PLU code (max. 10 PLUs)

- ⑤ Reading of programmed link PLU
(Reading in the PGM2 mode)

YOUR RECEIPT	
THANK YOU	
21/09/93 10:30 11-1	
123456#1076 MEYER	
#2220 *PGM2*	
F0007	LP0008
	P0009
	P0010

Link PLU/linked PLU code (max. 5 PLUs)

- ⑥ Reading of programmed level range
(Reading in the PGM2 mode)

YOUR RECEIPT

THANK YOU

21/09/93 10:31 11-1
123456#1077 MEVER

#2217 *PGM2*

1	0001	-0090	PLU level
2	0091	-0180	
3	0181	-0270	

- ⑦ Reading of miscellaneous preset
(Reading in the PGM1 and PGM2 modes)

YOUR RECEIPT		
THANK YOU		
21/09/93 11:08 11-1		
123456#1099 MEYER		
#2600 *PGM2*		
#2614		Logo message
XXXXXXRESTAURANTXXXXX		
XXXXXXSHARPXXXXX		
#2615	00 00 1 0	Slip/VP
#2616		Optional feature
1	00000000	
2	00000000	
3	00001000	
4	00000000	
#2617	030	Drawer open alarm time
#2619	0 11	Hourly report: Memory type/start time
#2620		Stacked report
	10	
	13	
#2630	1234	Secret code for PGM1 mode
#2631	0000	Secret code for X1/Z1 mode
#2632	0000	Secret code for X2/Z2 mode

- ⑧ Reading of programmed items for functions
(Reading in the PGM1 and PGM2 modes)

YOUR RECEIPT THANK YOU

21/09/93 10:47 11-1
123456#1079 MEYER

#1300 XPGM2X

F001 (-) 1
I -0.00
L16
F002 (-) 2
S -0.00
L17
F003 (-) 3
S -0.00
L17
F004 (-) 4
S -0.00
L17
F005 %1
I -0.00%
L 20.00%
F006 %2
S -12.25%
L100.00%
F007 %3
S -0.00%
L100.00%
F008 %4
S -0.00%
L100.00%
F009 SET PLU-
F010 DIFFER
F011 TAX1 ST
F012 TAX2 ST
F013 TAX3 ST
F014 TAX ST
F015 VAT 1
F016 VAT 2
F017 VAT 3
F018 VAT

F019 NET1
F020 NET2
F021 CP PLU
F022 REFUND
F023 *
F024 * MODE
F025 MGR *
F026 SBTL *
F027 HASH *
F028 HASH RF
F029 VP CNT
F030 SLIP CNT
F031 NO SALE
F032 G.C. CNT
F033 XXXPBA
F034 XXXNBA
F035 XXXRA L18
F036 XXXRA2 L18
F037 XXXPD L18
F038 XXXPD2 L18
F039 CA/CHK
99.99
F040 CASH L18
000000000000
F041 CASH2 L18
000000000000
F042 CHECK L18
000000000000
F043 CREDIT1 L18
000100000010
F044 CREDIT2 L15
000000000000
F045 CREDIT3 L18
000000000000
F046 CREDIT4 L18
000000000000
F047 CREDIT5 L18
000000000000
F048 CREDIT6 L18
000000000000
F049 CREDIT7 L18
000000000000
F050 CREDIT8 L18
000000000000
F051 EXCH1
0.0000

F052 EXCH2
 0.0000
 F053 EXCH3
 0.0000
 F054 EXCH4
 F055 EXCH1 IS
 F056 EXCH2 IS
 F057 EXCH3 IS
 F058 XXXCID
 9999999.99
 F059 CA/CH IS
 F060 CA/CH ID
 F061 CHK/CG
 9999999.99
 F062 GUEST
 F063 ORDER TL
 F064 PAID TL
 F065 DOM.CUR1
 F066 DOM.CUR2
 F067 DOM.CUR3
 F068 DOM.CUR4
 F069 XCH ID
 F070 XDEPT TL
 F071 DEPT(-)
 F072 XBTL TL
 F073 BTTL(-)
 F074 XHASH TL
 F075 HASH(-)
 F076 NET 1
 F077 NET 2
 F078 NET 3
 F079 NET
 F080 SUBTOTAL
 F081 MOSE ST
 F082 XXXTOTAL
 F083 CHANGE
 F084 BALANCE
 F085 ITEMS
 F086 PLU ST
 F087 COPY
 F088 G.C COPY
 F089 SLIP PR.
 F090 NEXT P.
 F091 AVE.
 F092 GROUP01
 F093 GROUP02

F094 GROUP03
 F095 GROUP04
 F096 GROUP05
 F097 GROUP06
 F098 GROUP07
 F099 GROUP08
 F100 GROUP09
 F101 CCD
 F102 CCD DIF.
 F103 DIF. TL
 F104 D-P
 F105 DEPT
 F106 GROUP
 F107 PLU
 F108 STOCK
 F109 TRANS.
 F110 TL-ID
 F111 CASHIER
 F112 HOURLY
 F113 DAILY
 F114 SET PLU
 F115 TTL TAX
 F116 NET
 F117 TOWNNAME
 F118 TOWNNAME

- ⑨ Reading of programmed tax rate
(Reading in the PGM2 mode)

YOUR RECEIPT
THANK YOU

21/09/93 11:05 11-1
123456#1084 MEVER

#2700 *PGM2*

TAX1	3.0000%	0.00
TAX2	7.0000%	0.12
TAX3	4.0000%	0.10

Tax no./tax rate

Lowest taxable amount

- ⑩ Reading of programmed dept. and PLU codes for direct keys
(Reading in the PGM2 mode)

YOUR RECEIPT

THANK YOU

21/09/93 11:05 11-1
123456#1085 MEYER

#2119 XFGM2X

001	D01
002	D02
003	D03
004	D04
005	D05
006	D06
007	D07
008	D08
009	D09
010	D10
011	D11
012	D12
013	D13
014	D14
015	D15
016	D16
017	D17
018	D18
019	D19
020	D20
021	F0001
022	F0002
023	F0003
024	F0004
025	F0005
026	F0006
027	F0007
028	F0008

Key no./dept. or PLU code

155	---
156	---
157	---
158	---
159	---
160	---

REGISTRATIONS

* Preparations for entries

- (1) Put the operator key in the mode switch and turn it to the REG position.
- (2) Press your assigned push-button cashier key.
- (3) Check to see if your register has both the journal and receipt rolls. If your register lacks these rolls or has low rolls, install new paper rolls or replace the old rolls with new ones according to "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".

* Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and the error code on the display. Clear the error state by pressing the **CL** key and take a proper action.

- (1) When you enter an over 32-digit number (entry limit overflow):
 - Cancel the entry and re-enter a correct number.
- (2) When you make an error in key operation:
 - Clear the error and operate keys correctly.
- (3) When you make an entry beyond a programmed amount entry limit:
 - Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- (4) When a subtotal exceeds eight digits:
 - Clear the subtotal and press the **TL** , **CA2** , **CH** , **CR1** ~ **CR8** or **EX1** ~ **EX4** key to finalize the transaction.

1. Cashier assignment

Cashier can be assigned on two systems: Push-button cashier key, and real cashier key systems. For how to select two systems, consult your local dealer.

Push-button cashier key system (factory-set)

If you select this system, cashiers can be assigned by pressing corresponding push-button cashier keys.

Real cashier key system

If you select this system, any cashier cannot be assigned without inserting a corresponding real cashier key. Any registration cannot be performed unless a real cashier key is inserted.

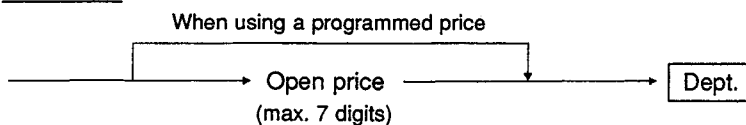
2. Item entries

(1) Single item entries

- **Entries into departments**

Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.

Procedure



Open price: Less than a programmed upper limit

Key operation	Print
1200 <input type="button" value="8"/>	
<input type="button" value="6"/>	
<input type="button" value="TL"/>	
	DPT.08 ¥12.00 DPT.06 ¥4.10 CASH ¥16.10

Note: When those departments for which the unit price has been programmed as 0 (zero) are entered by using preset unit price, the quantity alone is added.

- **PLU entries (indirect PLU entries)**

Enter a PLU number and press the key.

Procedure



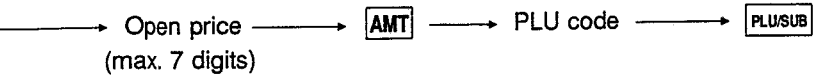
Key operation	Print
2 <input type="button" value="PLU/SUB"/>	
<input type="button" value="TL"/>	
	PLU0002 ¥1.20 CASH ¥1.20

Note: When those PLUs for which the unit price has been programmed as 0 (zero) are entered, the quantity alone is added.

• **Subdepartment (open PLU) entries**

Follow this sequence:

Procedure



Open price: Less than a programmed upper limit

Key operation

1275 **AMT**
10 **PLU/SUB**
TL

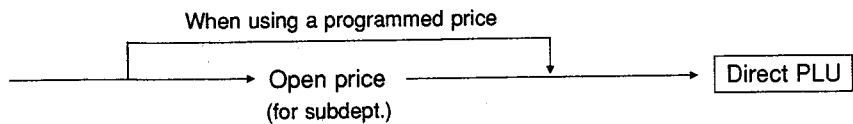
Print

PLU0010 ¥12.75
CASH ¥12.75

• **Direct PLU (Menu) entries**

Follow this sequence:

Procedure



Open price: Less than a programmed upper limit

Key operation

2
TL

Print

PLU0002 ¥1.20
CASH ¥1.20

(2) Repeat entries

You can use this function for entering two or more of the same item.

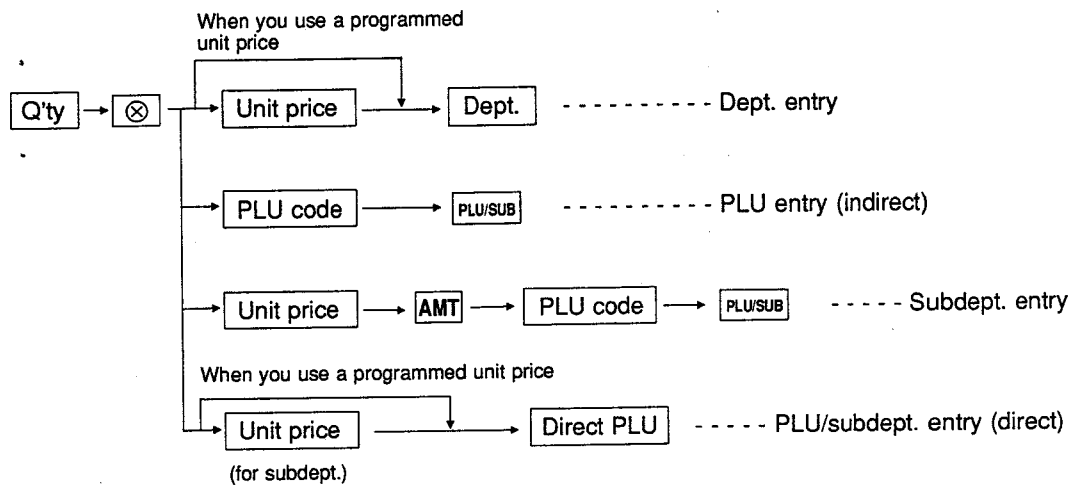
Key operation		Print
Repeated department entry →	200 <input type="text" value="3"/>	DPT.03 ¥2.00
	<input type="text" value="3"/>	DPT.03 ¥2.00
	<input type="text" value="3"/>	DPT.03 ¥2.00
Repeated PLU entry (indirect PLU) →	10 <input type="text" value="PLU/SUB"/>	PLU0010 ¥70.00
	<input type="text" value="PLU/SUB"/>	PLU0010 ¥70.00
	<input type="text" value="PLU/SUB"/>	PLU0010 ¥70.00
Repeated subdepartment entry →	285 <input type="text" value="AMT"/>	PLU0006 ¥2.85
	6 <input type="text" value="PLU/SUB"/>	PLU0006 ¥2.85
	<input type="text" value="PLU/SUB"/>	PLU0004 ¥84.00
Repeated Direct PLU entry →	<input type="text" value="4"/>	PLU0004 ¥84.00
	<input type="text" value="4"/>	PLU0004 ¥84.00
	<input type="text" value="4"/>	PLU0004 ¥84.00
	<input type="text" value="TL"/>	
		CASH ¥473.70

(3) Multiplication entries

Use this feature when you need to enter two or more of the same item.

This feature helps when you enter a large quantity of items or need to enter quantities that contain decimals.

Procedure



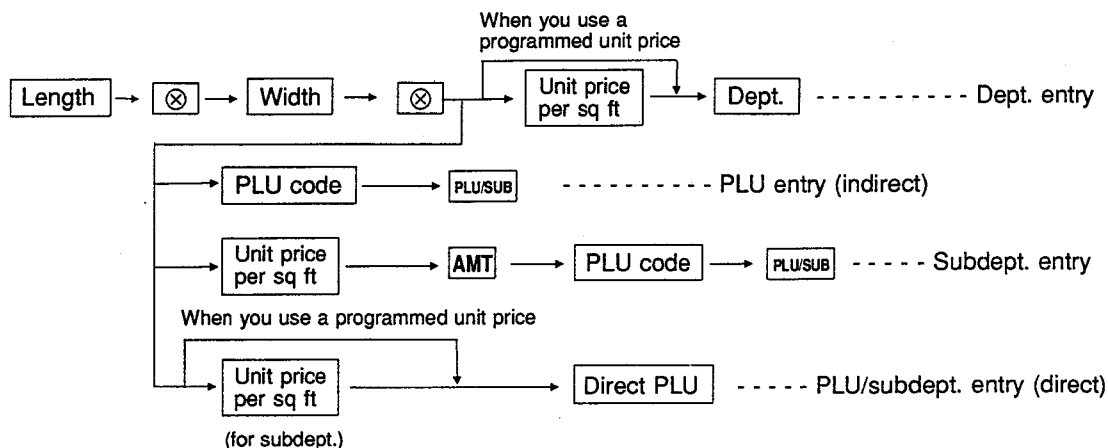
- Q'ty: up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: less than a programmed upper limit (max. 999999)
- Q'ty x unit price: up to seven digits

Key operation		Print
Dept. entry	5 <input type="button" value="⊗"/>	<div> 5x 1.65 DPT.03 ¥8.25 15x 5.00 PLU0003 ¥75.00 25x 3.00 PLU0010 ¥75.00 5x 1.20 PLU0002 ¥6.00 CASH ¥164.25 </div>
	165 <input type="button" value="3"/>	
PLU entry (indirect PLU)	15 <input type="button" value="⊗"/>	
	3 <input type="button" value="PLU/SUB"/>	
Subdept. entry	25 <input type="button" value="⊗"/>	
	300 <input type="button" value="AMT"/>	
Direct PLU entry	10 <input type="button" value="PLU/SUB"/>	
	5 <input type="button" value="⊗"/>	
	<input type="button" value="2"/>	
	<input type="button" value="TL"/>	

(4) Successive multiplication entries (option)

This function is practical for example when you enter a sale of items sold by area (square feet).

Procedure



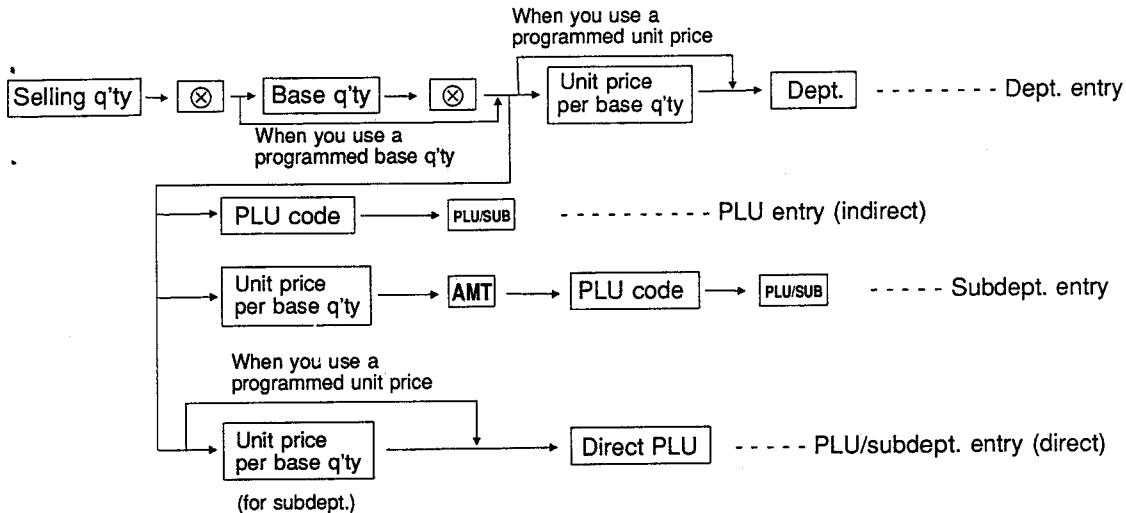
- Length or width: up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: less than a programmed upper limit
- Length x Width x Unit price: up to seven digits

Key operation	Print
Department entry using the successive multiplication entry function → { 3 ⊗ 4 ⊗ 400 5	3x 4x 4.00 DPT.05 ¥48.00
PLU entry using the successive multiplication entry function → { 1 . 5 ⊗ 2 . 5 ⊗ 8 PLU/SUB	1.5x 2.5x 4.50 PLU0008 ¥16.88
Subdepartment entry using the successive multiplication entry function → { 1 . 75 ⊗ 1 . 75 ⊗ 600 AMT 7 PLU/SUB TL	1.75x 1.75x 6.00 PLU0007 ¥18.38 CASH ¥83.26

(5) Split-pricing entries (option)

You will use this function when your customer wants to purchase more or less than the base quantity of a loose item.

Procedure



- Selling quantity: up to seven digits (4-digit integer + 3-digit decimal)
- Base quantity: up to two digits (integer)

Key operation		Print
Department entry using the split-pricing entry function →	7 <input type="button" value="⊗"/>	7x 10/ 6.00 DPT.03 ×4.20 8x 5/ 3.20 PLU0006 ×5.12 9x 6/ 1.85 PLU0004 ×2.78 CASH ×12.10
	10 <input type="button" value="⊗"/>	
	600 <input type="button" value="3"/>	
PLU entry using the split-pricing entry function →	8 <input type="button" value="⊗"/>	
	5 <input type="button" value="⊗"/>	
	6 <input type="button" value="PLUSUB"/>	
Subdepartment entry using the split-pricing entry function →	9 <input type="button" value="⊗"/>	
	6 <input type="button" value="⊗"/>	
	185 <input type="button" value="AMT"/>	
	4 <input type="button" value="PLUSUB"/>	
	<input type="button" value="TL"/>	

(6) Single item cash sale (SICS)/single item finalize (SIF) entries

① SICS entries

- This function is useful when a sale is for only one item and is for cash; such as a pack of cigarettes. This function is applicable only to those departments that have been set for SICS or to their associated PLUs or Direct PLU.
- The transaction is finalized and the drawer opens as soon as you press the department key, **PLU/SUB** key or direct PLU key.

Key operation	Print
2800	
For finishing the transaction → 2	DPT.02 ¥28.00
	CASH ¥28.00

Note: If a ring-up to a department or PLU/Direct PLU set for SICS follows the ones to departments or PLUs not set for SICS, it does not finalize and results in a normal sale.

② SIF entries

- If a ring-up to a department or PLU/subdepartment set for SIF follows the ones to departments or PLUs/subdepartments not set for SIF, the transaction is finalized immediately as a cash sale.
- Like the SICS function, this function is available for single-item cash settlement.

Key operation	Print
1745 8	
450	DPT.08 ¥17.45
For finalizing the transaction → 9	DPT.09 ¥4.50
	CASH ¥21.95

3. Other entries for PLUs

(1) Set PLU entries

Operation is the same as for normal PLU's.

When a set PLU is entered, the linked PLU's labels are printed automatically.

Key operation	Print
<div>11</div> <div>TL</div>	<div>PLU0011 ¥30.30</div> <div>PLU0012</div> <div>PLU0013</div> <div>PLU0014</div> <div>PLU0015</div> <div>PLU0016</div> <div>CASH ¥30.30</div>

Note: The total of the unit prices of the linked PLU is the registered amount of the set PLU. If a unit price is set in the set PLU (ex. PLU 11), the price will be reduced from the total.

(2) Link PLU entries

Operation is the same as for normal PLU's.

When a link PLU is entered, the linked PLU's amount is included and the linked PLU's label is printed automatically.

Key operation	Print
<div>7 <div>PLUSUB</div></div> <div>TL</div>	<div>PLU0007 ¥45.00</div> <div>PLU0008 ¥4.50</div> <div>PLU0009 ¥16.00</div> <div>PLU0010 ¥70.00</div> <div>CASH ¥135.50</div>

(3) PLU level shift (for direct PLU)

The shift can double or triple the number of PLUs on your register without adding additional direct PLU keys. You can use direct PLUs in three levels by utilizing shift keys **L1**, **L2**, and **L3**. These keys have the following functions.

L1 : Shifts the PLU level from level 2 or 3 to level 1 (base level).

L2 : Shifts the PLU level from level 1 or 3 to level 2.

L3 : Shifts the PLU level from level 1 or 2 to level 3.

You must program PLU level shift mode (i.e. Automatic return mode* or lock shift mode**) and mode switch position for PLU level shift (i.e. REG and MGR positions or MGR position) with job #2616.

* The automatic return mode automatically shifts the PLU level back to level 1 after a direct PLU key is pressed.

You can select whether PLU level returns each time you enter 1 item or it returns each time you finalize 1 transaction with job #2616.

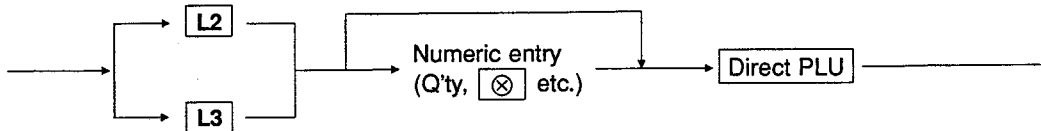
** The lock shift mode holds the current PLU level until depression of a PLU level shift key.

• Automatic return mode

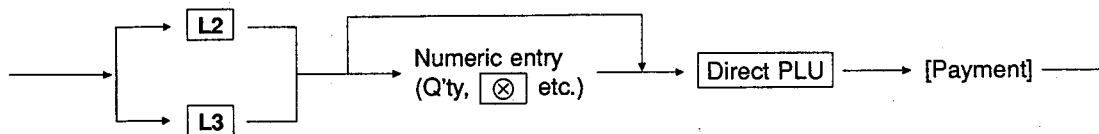
If you shift the PLU level in the automatic return mode, press a desired PLU level shift key before numeric entry.

Key entry sequence

(each item)



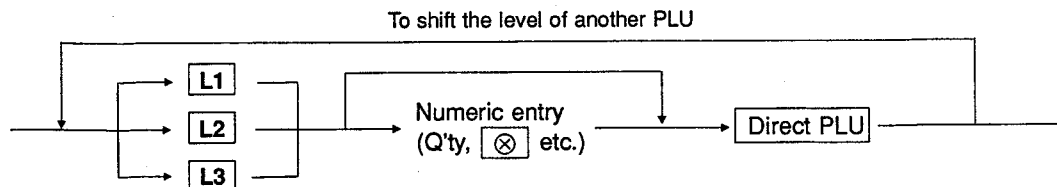
(each transaction)



• Lock shift mode

If you shift the PLU level in the lock shift mode, press a desired PLU level shift key before a numeric entry.

Key entry sequence



Note: If you select the automatic return mode, it is not necessary to use the **L1** key on the keyboard, but if you select the lock shift mode, it is necessary to use the key.

- When your register has been programmed for the automatic return mode:

Key operation		Print
	<input type="text" value="1"/>	
<input type="button" value="L2"/>	<input type="text" value="1"/>	PLU0001 ¥1.15
<input type="button" value="L3"/>	<input type="text" value="1"/>	PLU0091 ¥8.00
	<input type="text" value="1"/>	PLU0181 ¥5.00
	<input type="button" value="TL"/>	CASH ¥14.15

- When your register has been programmed for the lock shift mode:

Key operation		Print
<input type="button" value="L1"/>	<input type="text" value="1"/>	
<input type="button" value="L2"/>	<input type="text" value="1"/>	PLU0001 ¥1.15
<input type="button" value="L3"/>	<input type="text" value="1"/>	PLU0091 ¥8.00
	<input type="text" value="1"/>	PLU0181 ¥5.00
	<input type="button" value="TL"/>	CASH ¥14.15

4. Display of subtotals

Press the key at any point during a transaction. Then the machine state symbol "☐" and the subtotal will appear in the display and the "ST" lamp will light up.

Key operation		Print
500	<input type="text" value="1"/>	
1000	<input type="text" value="2"/>	STEAK ¥5.00
1500	<input type="text" value="3"/>	DPT.02 ¥10.00
	<input type="button" value="ST"/>	DPT.03 ¥15.00
	<input type="button" value="TL"/>	CASH ¥30.00

5. Finalization of transaction

(1) Cash or cheque tendering

Press the **[ST]** key to get a subtotal, enter the amount tendered by your guest, then press the **[TL]** key if it is a cash tender or press the **[CH]** key if it is a cheque tender.

When the amount tendered is greater than that amount of the sale, your register will show the change due amount. Otherwise your register will show a deficit.

- Cash tendering

Key operation	Print
<div>1000</div> <div>[ST]</div> <div>[TL]</div>	<div>***TOTAL ¥7.35</div> <div>CASH ¥10.00</div> <div>CHANGE ¥2.65</div>

- Cheque tendering

Key operation	Print
<div>1000</div> <div>[ST]</div> <div>[CH]</div>	<div>***TOTAL ¥7.35</div> <div>CHECK ¥10.00</div> <div>CHANGE ¥2.65</div>

(2) Mixed tendering (cheque + cash)

Key operation	Print
<div>1000</div> <div>[ST]</div> <div>[CH]</div> <div>500</div> <div>[TL]</div>	<div>***TOTAL ¥14.56</div> <div>CHECK ¥10.00</div> <div>CASH ¥5.00</div> <div>CHANGE ¥0.44</div>

(3) Cash or cheque sale that does not need a tender amount entry

Enter items and press the **TL** key if it is a cash sale or press the **CH** key if it is a cheque sale. Your register will display the total sale amount.

Key operation	Print
300 1	STEAK ¥3.00
2 PLUS/SUB	PLU0002 ¥1.20
TL	CASH ¥4.20
	In the case of cheque sale
	CHECK ¥4.20

(4) Credit sale

Enter items and press the credit key.

Key operation	Print
2500 1	STEAK ¥25.00
3250 2	DPT.02 ¥32.50
CR1	CREDIT1 ¥57.50

(5) Mixed-tender sale (cash or cheque tendering + credit sale)

Key operation	Print
950 <input type="button" value="ST"/>	<div>xxxTOTAL ¥49.50 CASH ¥9.50 CREDIT1 ¥40.00</div>
<input type="button" value="TL"/>	
<input type="button" value="CR1"/>	

Note: For cheque tendering, press the key instead of the key.

6. Computation of VAT (Value Added Tax)/tax

The machine may be programmed for the following six tax systems by your dealer.

① Automatic VAT 1, 2, 3 system (Automatic operation method using programmed percentages)

This system, at settlement, calculates VAT for taxable 1, taxable 2, and taxable 3 subtotals by using the corresponding programmed percentages.

② Automatic tax 1, 2, 3 system (Automatic operation method using programmed percentages)

This system, at settlement, calculates taxes for taxable 1, taxable 2, and taxable 3 subtotals by using the corresponding programmed percentages, and also adds the calculated taxes to those subtotals, respectively.

③ Manual VAT 1, 2, 3 system (Manual entry method using programmed percentages)

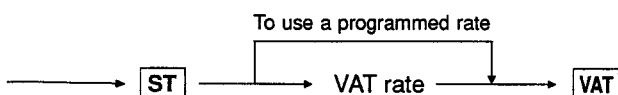
Procedure



This system provides the VAT calculation for taxable 1, taxable 2, and taxable 3 subtotals. This calculation is performed using the corresponding programmed percentages when the key is pressed just after the key.

④ Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 preset percentages)

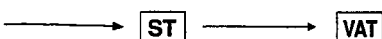
Procedure



This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 preset percentages when the key is pressed just after the key. For this system, the keyed-in tax rate can be used.

⑤ Manual tax 1, 2, 3 system (Manual entry method using programmed percentages)

Procedure



This system provides the tax calculation for taxable 1, taxable 2, and taxable 3 subtotals. This calculation is performed using the corresponding programmed percentages when the **VAT** key is pressed just after the **ST** key. After this calculation, you must finalize the transaction.

⑥ Automatic tax 1, 2, 3 system and VAT1 system for Spain and Switzerland

In the case of Spain, these specific tax systems allow the calculation of amounts to be paid out for three types of taxes applicable in this country. These taxes are automatically added to the resulting subtotals 1–3. Moreover, in the case of Switzerland, the amount of value added tax – included in the resulting subtotal – is calculated separately.

In both cases the calculation is based on respective preprogrammed percentages.

Key operation	Print
(When the manual VAT 1, 2, 3 system is selected.)	
550 8	
ST	
VAT	
TL	
	DPT.08 ¥5.50
	SUBTOTAL ¥5.50
	TAX1 ST ¥5.50
	VAT 1 ¥0.16
	NET 1 ¥5.34
	 CASH ¥5.50

7. Auxiliary entries

(1) Percent calculations (premium or discount)

- Your register provides the percent calculation for the subtotal of each item entry.
- Percentage: 0.01 to 100.00% (Less than a programmed upper limit)

1) Percent calculation for item entries

Key operation	Print
800 1	
%1	
715 7	
7 • 5 %1	
TL	
	STEAK ¥8.00
	-10.00%
	¥1 -0.80
	DPT.07 ¥7.15
	-7.5%
	¥1 -0.54
	 CASH ¥13.81

2) Percent calculation for the subtotal

Key operation	Print
4 <input type="button" value="⊗"/>	
140 <input type="button" value="6"/>	
220 <input type="button" value="7"/>	
<input type="button" value="7"/>	
<input type="button" value="ST"/>	
<input type="button" value="%2"/>	
<input type="button" value="TL"/>	
	<div> <div>4x 1.40</div> <div>DPT.06 ¥5.60</div> <div>DPT.07 ¥2.20</div> <div>DPT.07 ¥2.20</div> <div>MDSE ST ¥10.00</div> <div>10.00%</div> <div>¥2 ¥1.00</div> <div>CASH ¥11.00</div> </div>

(2) Deduction

Your register allows you to deduct a certain amount less than a programmed upper limit after the entry of an item or the computation of a subtotal.

1) Deduction for item entries

Key operation	Print
850 <input type="button" value="8"/>	
50 <input type="button" value="⊖1"/>	
<input type="button" value="3"/>	
<input type="button" value="⊖1"/>	
<input type="button" value="TL"/>	
	<div> <div>DPT.08 ¥8.50</div> <div><->1 -0.50</div> <div>DPT.03 ¥47.00</div> <div><->1 -1.00</div> <div>CASH ¥54.00</div> </div>

2) Deduction for the subtotal

Key operation	Print
710 <input type="button" value="6"/>	
500 <input type="button" value="7"/>	
<input type="button" value="ST"/>	
25 <input type="button" value="⊖2"/>	
<input type="button" value="TL"/>	
	DPT.06 ¥7.10
	DPT.07 ¥5.00
	(-)>2 -0.25
	CASH ¥11.85

(3) Refund entries

For refund entry, press the key first and then the department, PLU and direct PLU keys.
Repeated or multiplied refund entries are also possible.

Key operation	Print
250 <input type="button" value="RF"/> <input type="button" value="1"/>	
7 <input type="button" value="⊗"/>	
<input type="button" value="RF"/> <input type="button" value="3"/>	
<input type="button" value="TL"/>	
	STEAK R-2.50
	-7x 5.00
	PLU0003 R-35.00
	CHANGE ¥37.50

(4) Printing of non-add code numbers

Enter a non-add code number such as a guest code number and credit card number within a maximum of 16 digits and press the key. The numerical entry can be made at any point during the entry of a sale.
Your register will print it at once.

Key operation	Print
1230 <input type="button" value="#"/>	
1500 <input type="button" value="1"/>	
<input type="button" value="TL"/>	
	#000000000000001230
	STEAK ¥15.00
	CASH ¥15.00

8. Manual PB+/PB- entries

The PBAL entry refers to the entry of the final amount (NBAL) of the preceding entry.

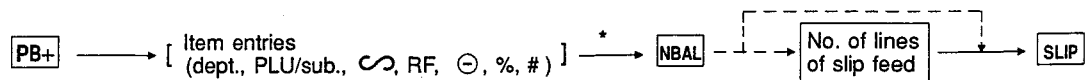
The entry of NBAL is intended for temporary settlement during a series of entries.

If you need this function, please consult your local dealer.

(1) New guest

For a new guest, open a new guest check.

Procedure



Only when the buffered slip system is selected

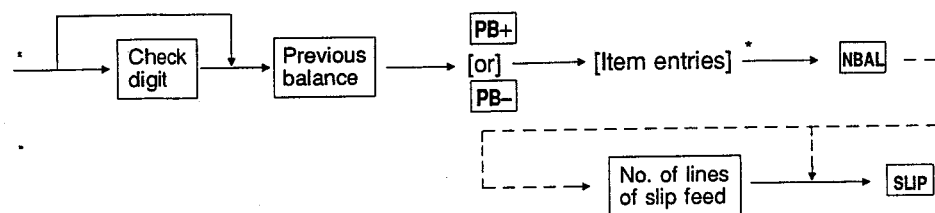
* From this point you can proceed to the partial or full payment operation in the settlement procedure.

Key operation	Print
PB+	
800 7	21/09/93 18:16 11-1
700 6	123456#1104 MEYER
NBAL	
	XXXPBAL ¥0.00 DPT.07 ¥8.00 DPT.06 ¥7.00 XXXNBAL ¥15.00

(2) Additional ordering

For an existing guest, enter the previous balance. (Your register may be programmed to require that a check digit be added to the previous balance amount.)

Procedure



Only when the buffered slip system is selected

PB+ : When the amount is plus or zero

PB- : When the amount is minus

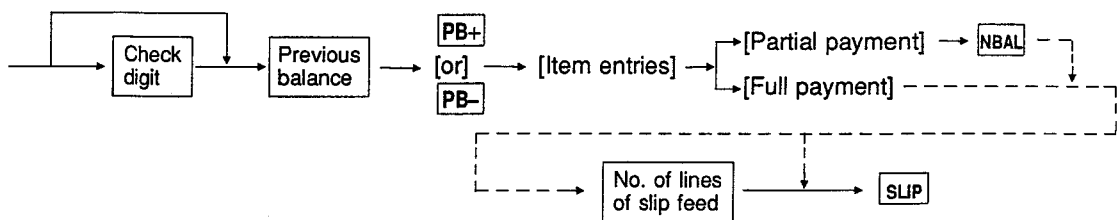
* From this point you can proceed to the partial or full payment operation in the settlement procedure.

Key operation	Print
1500 PB+	21/09/93 18:19 11-1
100 1	123456#1107 MEVER
1	
NBAL	XXXPBAL ¥15.00
	STEAK ¥1.00
	STEAK ¥1.00
	XXXNBAL ¥17.00

(3) Settlement

Use the following procedure.

Procedure



Only when the buffered slip system is selected

Key operation	Print
1700 PB+	21/09/93 18:21 11-1
1000 CH	123456#1109 MEVER
700 TL	***PBAL ¥17.00
	***TOTAL ¥17.00
	CHECK ¥10.00
	CASH ¥7.00
	CHANGE ¥0.00

9. Payment treatment

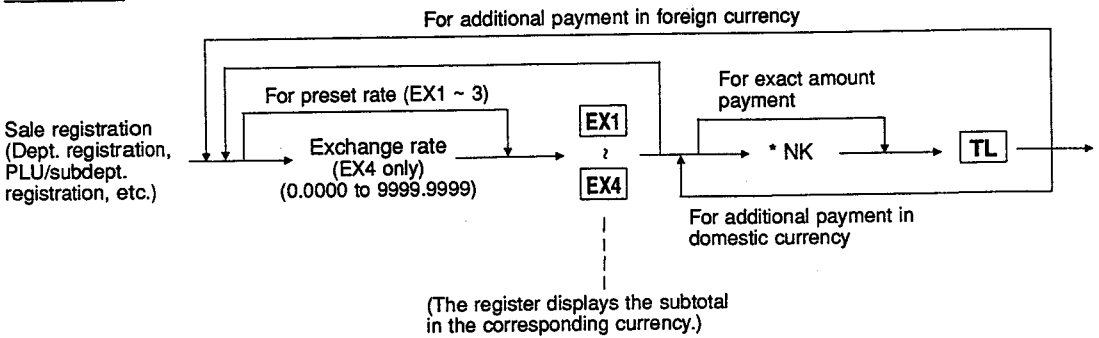
(1) Currency exchange

The register allows payment registrations in a maximum of four kinds of foreign currency.

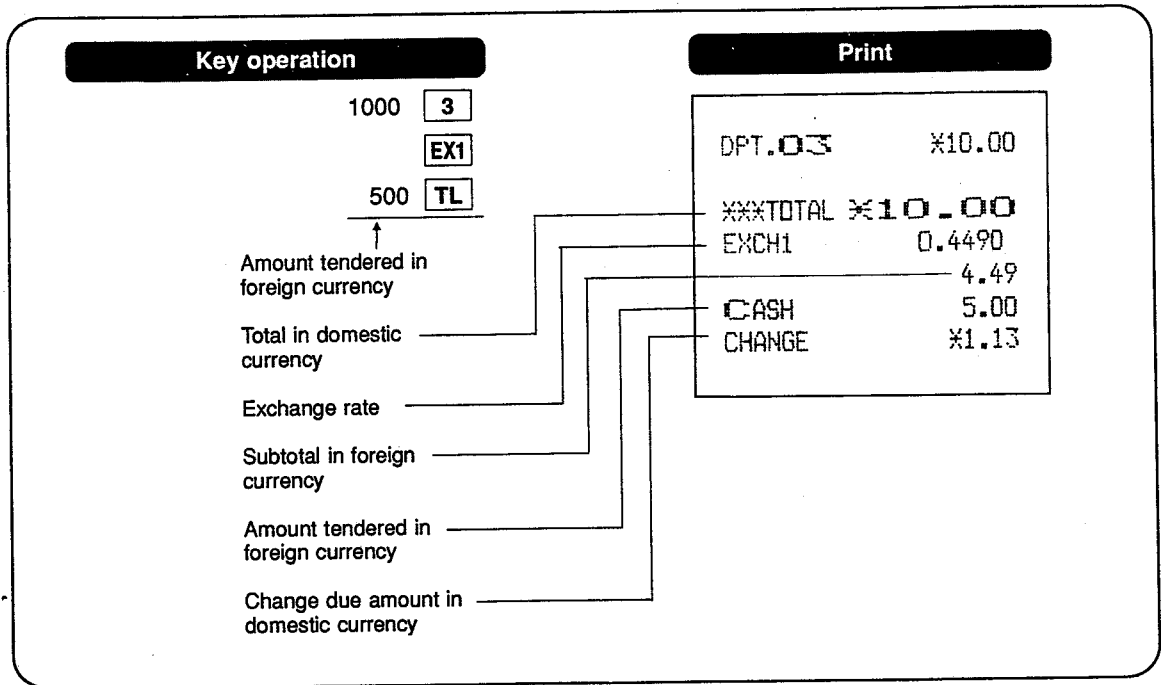
- EX1 to EX3 : Currency exchange can only be achieved by using a preset exchange rate when these keys are used.
- EX4 : Currency exchange can only be achieved by using a keyboarded exchange rate when this key is used.

The EX2 to EX4 keys are options.

Procedure

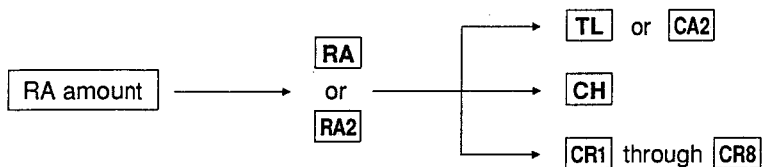


* NK: Amount tendered in the corresponding currency (max. 8 digits)



(2) Received-on account entries

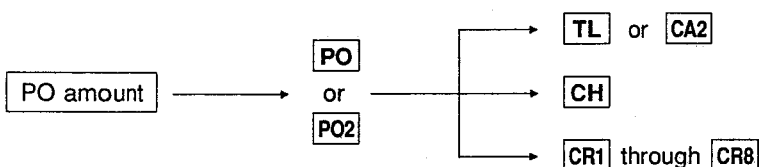
Procedure



Key operation	Print
12345 #	#00000000000012345
4800 RA	CASH
TL	XXXRA ¥48.00

(3) Paid out entries

Procedure



Key operation	Print
6789 #	#0000000000006789
3000 PO	CASH
TL	XXXPO ¥30.00

(4) No sale (exchange)

Simply press the **NS** key without any entry. The drawer will open and the machine will print the "NO SALE" on both the journal and the receipt.

#0000000000004567
NO SALE


(5) Cashing a cheque

You can cash a cheque. Enter an amount, then press the **CH** key.

<div>Key operation</div> <div>2000 CH</div>	<div>Print</div> <div>CA/CHK ¥20.00</div>
--	--

CORRECTION

1. Correction of the last entry (direct void)

If you make any incorrect department, PLU/subdepartment, percentage, deduction, or refund entry by mistake, you can void this incorrect entry by pressing the  key immediately after the incorrect entry.

Key operation		Print
1250		STEAK ¥12.50
		STEAK ¥-12.50
2		PLU0002 ¥1.20
		PLU0002 ¥-1.20
600		DPT.03 ¥6.00
		-10.00%
		¥1 -0.60
		¥1 ¥0.60
328		DPT.04 ¥3.28
		(-)1 -0.28
28		(-)1 ¥0.28
		CASH ¥9.28

2. Correction of the next-to-last or earlier entries (indirect void)

You can void any incorrect department, PLU/subdepartment, or refund entry made during a transaction by specifying it if you find it before finalizing the transaction (before making an amount tendered entry).

Key operation

1310 1
1 PLU/SUB
2
1 S PLU/SUB
1310 S 1
S 2
TL

Print

STEAK ¥13.10
PLU0001 ¥1.15
PLU0002 ¥1.20
PLU0001 ¥-1.15
STEAK ¥-13.10
PLU0002 ¥-1.20

CASH ¥0.00

3. Correction of the subtotal (subtotal void)

This function allows you to void an entire transaction that has not yet been finalized. When subtotal void is executed, the transaction is aborted and the register issues a receipt.

Key operation

1310 1
1755 2
10 PLU/SUB
55 PLU/SUB
825 7
ST
S
ST

Print

STEAK ¥13.10
DPT.02 ¥17.55
PLU0010 ¥70.00
PLU0055 ¥5.00
DPT.07 ¥8.25
MDSE ST ¥113.90
SBTL ¥ -113.90
***TOTAL ¥0.00

4. Handling of errors found after receipt issuance

If you (as a cashier) find any errors after the entry of a whole transaction has been completed or while an amount tendered entry is being made, you cannot void them. Only your manager can do (refer to "CORRECTION AFTER FINALIZING A TRANSACTION"). You will take this step.

- (1) If you are making an amount tendered entry, finalize the transaction.
- (2) Make correct entries from the beginning.
- (3) Hand the incorrect receipt to your manager for its cancellation.

VARIOUS PRINTING

1. Copy receipt printing

If your guest wants receipt after you have finalized a transaction with the receipt ON-OFF switch at the OFF position (no receipting), press the **RCPT** key.

Your register can print copy receipts.

Either full item printing or total amount printing can be selected for a copy receipt. (For details, contact your dealer.)

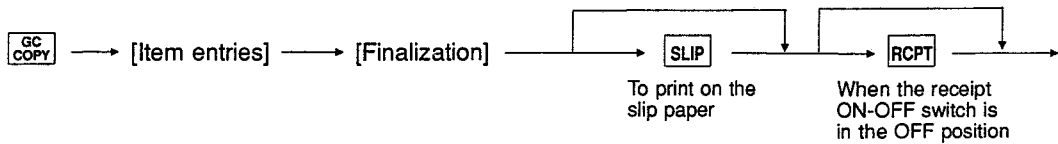
Key operation	Print on the receipt	Print on the journal
850 3		
3 ⊗		
150 1		
TL		
For receipting → RCPT	<div> <p>21/09/93 11:26 11-1 123456#1301 MEYER</p> <p>DPT.03 ¥8.50 3x 1.50 STEAK ¥4.50 CASH ¥13.00</p> </div> <div> <p>21/09/93 11:26 11-1 123456#1301 MEYER</p> <p>*COPY*</p> <p>DPT.03 ¥8.50 3x 1.50 STEAK ¥4.50 CASH ¥13.00</p> </div>	<div> <p>21/09/93 11:26 11-1 123456#1301 MEYER DPT.03 ¥8.50 3x 1.50 STEAK ¥4.50 CASH ¥13.00</p> </div>

When the receipt ON-OFF switch is in the ON position, the ***COPY*** symbol will be printed on the receipt.

2. Guest check copy

You can use this function when you want to take a copy of guest check.
Press the **GC COPY** key and make a desired entry.

Procedure



Note: The guest check copy has nothing to do with the memory.

Key operation

GC COPY

1480 **1**

TL

Print

%G.C COPY%

STEAK ¥14.80

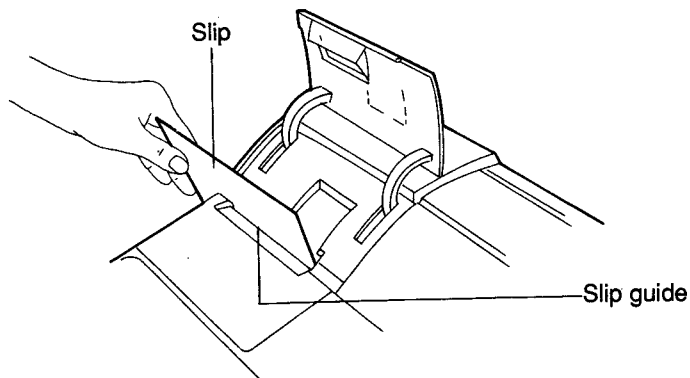
CASH ¥14.80

3. Validation printing function

The machine can perform validation printing.

3-1. Validation slip setting and printing

- (1) Insert the slip, with its printed face to the front of the machine, into the slip guide.
Make sure the slip is pushed in enough deep and fully to the right.
- (2) Now press the **VP** key. The validation printing will start.



Note: Programmed compulsory validation printing can be overridden by performing the following operation.
If you need this function, consult your dealer.

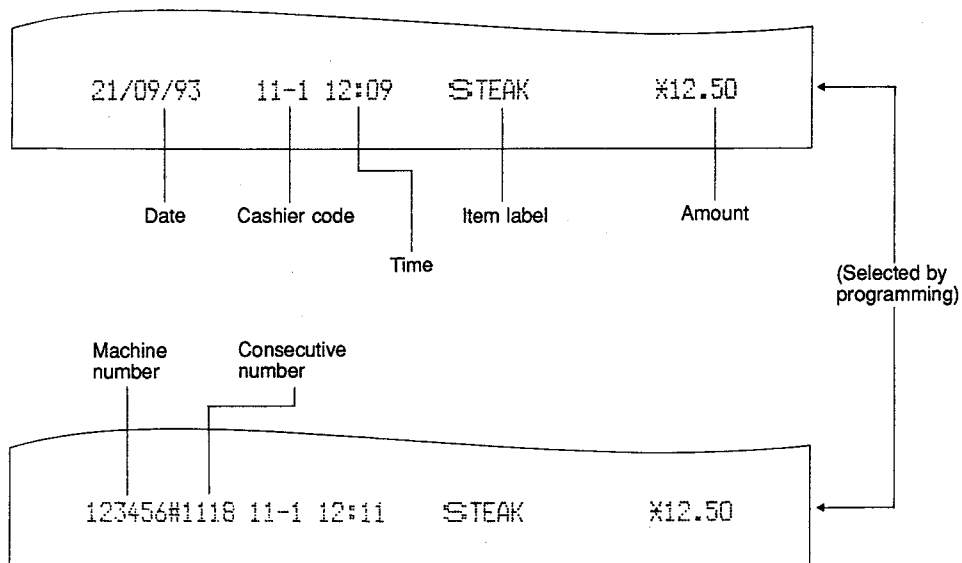
- (1) Turn the mode switch to the "MGR" position.

- (2) \longrightarrow  \longrightarrow **VP**

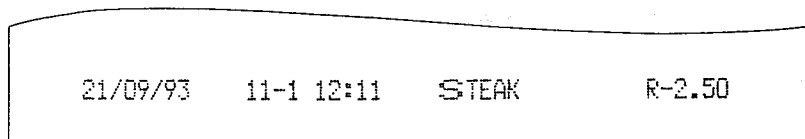
3-2. The validation printing can occur just after the following registrations

(1) Validation printing of item entries

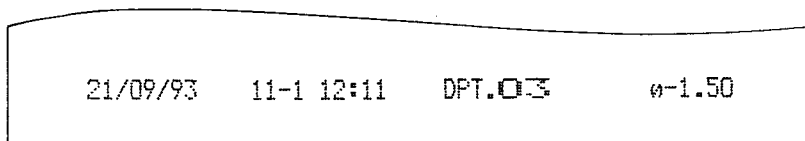
① Department entry



② Refund entry

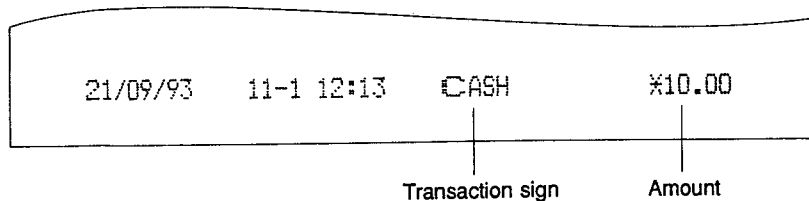


③ Direct or indirect void



Note: Other item entries can also be printed. For details, consult your local dealer.

(2) Validation printing after the finalization of a transaction



Transaction signs (programmable)

- | | |
|--|-------------------------|
| ① After completion of cash sale entry | |
| • When a change calculation occurs | *** TOTAL |
| • When no change calculation occurs | CASH |
| ② After completion of cheque sale entry | |
| • When a change calculation occurs | *** TOTAL |
| • When no change calculation occurs | CHECK |
| ③ After completion of credit sale entry | |
| • At only credit sale | CREDIT1 through CREDIT8 |
| • At mixed tendering (cheque sale + cash sale) | *** TOTAL |
| ④ After completion of PO entry | *** PO |
| ⑤ After completion of RA entry | *** RA |

3-3. Validation slip specification

Make validation slips according to the following specification.

The use of any slips other than specified causes the printer to malfunction.

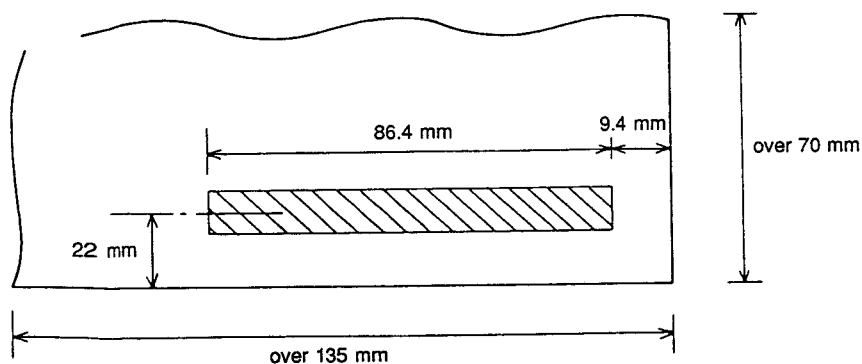
(1) Type of slip

Normal paper, pressure-sensitive paper, or carbon paper

(2) Dimensions of slip

Size: 135 mm or wider, 70 mm or longer

Thickness: 0.07 – 0.14 mm



OVERLAPPED CASHIER ENTRY

This function allows to switch from one cashier to another and to interrupt the first cashier's entry.

So the second cashier can do his entry in this mode.

For actual use of this function, contact your dealer.

Example:

Cashier 1 : Entry started

Cashier 2 : Cashier change (1 to 2), interrupt initiated

Cashier 2 : Transaction finished

Cashier 1 : Cashier change (2 to 1), entry restarted

Note 1: The overlapped cashier entry is not effective while the tendering sale is going on.

Note 2: Only the total sales amount is printed on the receipt in the overlapped cashier entry mode.

Note 3: If any cashier is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR, and no X/Z reports can be printed. The corresponding cashier number(s) is displayed at this time.

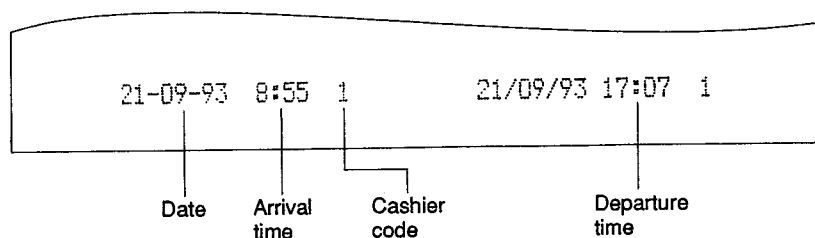
Key operation	Comments
<p>(1) Cashier 1 is specified. (Cashier key 1 is pressed.)</p> <p>100 <input type="text" value="1"/></p> <p>360 <input type="text" value="3"/></p> <p><input type="text" value="3"/></p>	<p>The entry by cashier 1 is started.</p>
<p>(2) Cashier 2 is specified. (Cashier key 2 is pressed.)</p> <p>3 <input type="text" value="⊗"/></p> <p>150 <input type="text" value="2"/></p> <p><input type="text" value="TL"/></p>	<p>The entry by cashier 2 is started. (The entry by cashier 1 is interrupted.)</p> <p>The transaction by cashier 2 is finalized.</p>
<p>(3) Cashier 1 is specified. (Cashier key 1 is pressed.)</p> <p>100 <input type="text" value="1"/></p> <p>300 <input type="text" value="3"/></p> <p><input type="text" value="TL"/></p>	<p>The entry by cashier 1 is restarted.</p> <p>The transaction by cashier 1 is finalized.</p>

PRINTING OF THE EMPLOYEE ARRIVAL AND DEPARTURE TIMES

The register allows the operator to print the employee arrival and departure times, using the validation printing function.

- (1) Turn the mode switch to the "OP X/Z" position.
- (2) Put a card into the paper chute and perform the following key operation.
 - 1) Arrival time (printed on the receipt)
Numeric key 1 → **VP**
 - 2) Departure time (printed on the journal)
Numeric key 2 → **VP**

Sample printout



MANAGER MODE


The manager mode is used when management decisions must be made concerning register entry, for example, for overriding limitations and void-mode operation.

You can also do all normal cash register operations in this mode.

To enter the manager mode, insert the manager key into the mode switch and turn it to the MGR position. A cashier key must also be pressed (or a real cashier key must also be inserted into the cashier switch).

CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT)

When the manager needs to void incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void, follow this procedure.

- (1) Put the manager or submanager key in the mode switch and turn it to the MGR position.
- (2) Press the  key to put your register in the VOID mode.
- (3) Repeat the entries that are recorded on an incorrect receipt.
This will result in all data for the incorrect transaction being removed from the machine's memory and the addition of the voided amounts to the VOID mode totalizer.

Incorrect receipt

```
21/09/93 17:00 11-1
123456#1168 MEVER

DPT.06      ¥25.00
DPT.07      ¥35.00

CASH      ¥60.00
```



Cancellation receipt

```
21/09/93 17:00 11-1
123456#1169 MEVER

¥60 MODEX
DPT.06      ¥25.00
DPT.07      ¥35.00

CASH      ¥60.00
```

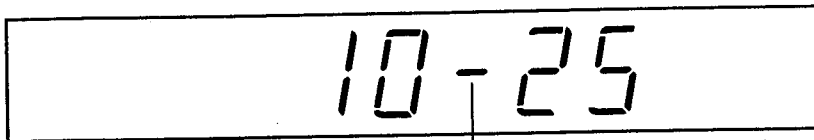
Note: Your machine retrieves the normal MGR mode whenever a transaction is canceled (i.e. finalized in the VOID mode). To void additional transactions repeat steps (2) and (3) above.

TIME DISPLAY AND AUTOMATIC UPDATING OF THE DATE

- **Time display**

When you need a time display, turn the mode switch to the OP X/Z position after the preceding transaction or operation is finalized.

Sample display of 10:25



This bar flashes every 0.5 second.

- **Automatic updating of the date**

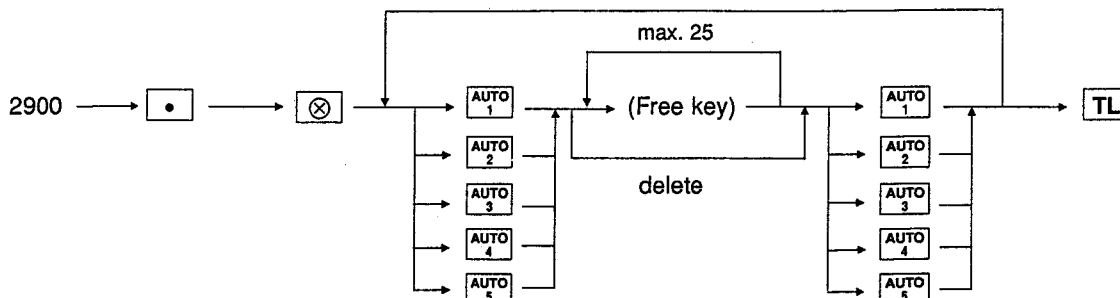
Once the internal clock unit is started at the correct time, it continues to run as long as the built-in battery is charged, and updates the date (day, month, year) properly.

AUTOMATIC KEY FUNCTION

• Programming the key sequence

You can program the key sequence data for **AUTO** key in X2/Z2 mode.

Procedure



Key operation

2900 . ⊗
 AUTO 1
 1 2 1 TL
 AUTO 1
 TL

Print

#2900 *PGM2*

#01

D01
 D02
 P0001
 TOTAL

• Automatic key entries

When **AUTO** key is depressed, the machine works as same as the programmed key-sequence is entered.

Operating modes that allow **AUTO** key entries:

- REG / MGR / VOID (You can use this function at any time.)
- OP X/Z / X1/Z1 / X2/Z2 (You can use this function when no operation has been done.)

Key operation

In REG mode

AUTO 1

Print

STEAK ¥20.00
 DPT.02 ¥6.30
 PLU0001 ¥1.15
 CASH ¥27.45

READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function (X) when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 through GT3, reset count, and consecutive number.
- X and Z reports are printed on both the receipt and journal.

Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports

- X1 and Z1 reports: Daily sales reports
- X2 and Z2 reports: Periodic (monthly) consolidation reports

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
General report (Full item report)	X1, Z1	X1, Z1	100	
		X2, Z2	200	
Full cashier report	X1, Z1	X1, Z1	150	
		X2, Z2	250	
Individual cashier report	X1, Z1	X1, Z1	151	
		X2, Z2	251	
	<OP X/Z> X, Z		51	
Full department report	X1	X1	110	
		X2	210	
Individual group report of dept.	X1	X1	112	
		X2	212	
Group total report	X1	X1	113	
		X2	213	
Total in drawer report	X1		131	
Transaction report	X1	X1	130	
		X2	230	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
PLU report by designated range	X1, Z1		120	<pre>graph LR; 120 --> DotBox[•]; Reading --> DotBox; DotBox --> XBox1[⊗]; XBox1 --> StartPLU[Start PLU code]; StartPLU --> XBox2[⊗]; XBox2 --> EndPLU[End PLU code]; EndPLU --> TL[TL];</pre>
PLU report by assigned dept.	X1		121	<pre>graph LR; 121 --> XBox1[⊗]; XBox1 --> DeptCode[Dept. code]; DeptCode --> TL[TL];</pre>
PLU stock report	X1		124	<pre>graph LR; 124 --> XBox1[⊗]; XBox1 --> StartPLU[Start PLU code]; StartPLU --> XBox2[⊗]; XBox2 --> EndPLU[End PLU code]; EndPLU --> TL[TL];</pre>
Hourly report	X1		160	<pre>graph LR; 160 --> XBox1[⊗]; XBox1 --> StartTime[Start time]; StartTime --> XBox2[⊗]; XBox2 --> EndTime[End time]; EndTime --> TL[TL];</pre>
	X1, Z1			<pre>graph LR; 160 --> DotBox[•]; Reading --> DotBox; DotBox --> XBox1[⊗]; XBox1 --> TL[TL];</pre>
Daily net report		X2, Z2	270	<pre>graph LR; 270 --> DotBox[•]; Reading --> DotBox; DotBox --> XBox1[⊗]; XBox1 --> TL[TL];</pre> <p>Performing job #200 will clear the daily net totals.</p>
Stacked report	X1, Z1	X1, Z1	190	<pre>graph LR; 190_290 --> DotBox[•]; Reading --> DotBox; DotBox --> XBox1[⊗]; XBox1 --> TL[TL];</pre>
		X2, Z2	290	

— SAMPLE REPORTS —

1. General report (Full item report)

• Sample X1 report

YOUR RECEIPT

THANK YOU

21/09/93 17:08 11-1
123456#1123 MEYER

#100 %X1% ————— Job no./mode

%DEPT%

D02 41.0000

DPT.02 %490.42

21.50%

D03 112.2000

DPT.03 %1781.19

78.08%

D15 2.0000

DPT.15 %9.60

0.42%

GROUP01 155.2000

%2281.21

32.18%

%DEPT TL 691.7650

%7089.46

100.00%

D20 7.0000

DPT.20 -14.30

DEPT(-) 7.0000

-14.30

D16 4.0000

DPT.16 %12.50

%HASH TL 4.0000

%12.50

D17 11.0000

DPT.17 -35.75

HASH(-) 11.0000

-35.75

• Sample Z1 report

YOUR RECEIPT

THANK YOU

21/09/93 17:08 11-1
123456#1124 MEYER

#100 %Z1%

Z1 0001 ————— Reset counter

GT1 %00000021581.81

GT2 %00000022017.91

GT3 -00000000436.10

The subsequent printout occurs in the same format as in the sample X1 report.

D18	4.0000
DPT.18	*14.70
*BTTL TL	4.0000
	*14.70

D19	10.0000
DPT.19	-25.85
BTTL(-)	10.0000
	-25.85

*TRANS. *

(-)>2	30
	-0.25

(-)>4	10
	-2.00

SET PLU-	*90.90
*2	20

	*0.00
*4	20
	-9.80

NET1	*7051.96
------	----------

DIFFER	*0.00
TAX1 ST	*154.69
VAT 1	*3.22
TAX2 ST	*91.16
VAT 2	*6.07
TAX3 ST	*328.30
VAT 3	*0.55

TTL TAX	*9.84
---------	-------

NET	*7042.12
-----	----------

NET2	*7061.80
------	----------

(-)>1	40
	-3.00

(-)>3	20
	-4.50

*1	20
	-1.34

*3	20
	-4.35

CP PLU	40
	-48.45

REFUND	50
	*49.50

	210
	*92.36

MODE	10
	*60.00

MGR "	20
	*60.00

SE TL "	90
	*2180.97

HASH "	30
	*25.50

HASH RF	20
	*6.30

VP CNT	210
--------	-----

SLIP CNT	00
----------	----

NO SALE	70
---------	----

XXXPBAL	20
---------	----

XXXNBAL	20
---------	----

G.C. CNT	30
----------	----

GUEST	2310
-------	------

ORDER TL	*7038.55
----------	----------

PAID TL	*7038.55
---------	----------

AVE.	*30.47
------	--------

O-P	*0.00
-----	-------

XXXRA	40
-------	----

	*72.50
--	--------

XXXRA2	10
--------	----

	*25.00
--	--------

XXXPO	40
-------	----

	*61.00
--	--------

XXXPO2	30
--------	----

	*75.00
--	--------

CA/CHK	10
--------	----

	*20.00
--	--------

CASH	1440
------	------

	*4559.83
--	----------

CASH2	180
-------	-----

	*333.54
--	---------

CHECK	70
-------	----

	*83.70
--	--------

CREDIT1	240
---------	-----

	*678.79
--	---------

CREDIT2	130
---------	-----

	*367.89
--	---------

To be continued

To be continued on the next page

CREDIT8	140
	*415.80
EXCH1	20
	55.00
DOM.CUR1	*22.26
EXCH2	10
	26.60
DOM.CUR2	*47.50
EXCH3	20
	47.01
DOM.CUR3	*60.10
EXCH4	10
	26.16
DOM.CUR4	*43.60
XXXXCID	*4859.06
*CH ID	*34.20
CA/CH ID	*4933.26
CHK/CG	*3.05

2. Full department report

• Sample X1 report

YOUR RECEIPT THANK YOU

21/09/93 17:09 11-1
123456#1125 MEYER

#110 *X1*
DEPT

D02	12.0000
DPT.02	*143.32
	12.18%
D03	88.2000
DPT.03	*1024.24
	87.01%
D15	2.0000
DPT.15	*9.60
	0.82%
GROUP01	102.2000
	*1177.16
	29.15%
D04	21.0000
DPT.04	*247.96
	59.99%
D05	52.0000
DPT.05	*165.40
	40.01%
GROUP02	73.0000
	*413.36
	10.24%

D12	26.0000
DPT.12	*199.05
	100.00%
GROUP09	26.0000
	*199.05
	4.93%
*DEPT TL	528.7650
	*4038.58
	100.00%

D20	7.0000
DPT.20	-14.30
DEPT(-)	7.0000
	-14.30

D16	6.0000
DPT.16	*18.80
*HASH TL	6.0000
	*18.80

D17	10.0000
DPT.17	-18.75
HASH(-)	10.0000
	-18.75

D18	6.0000
DPT.18	*24.20
*BTTL TL	6.0000
	*24.20

D19	8.0000
DPT.19	-21.85
BTTL(-)	8.0000
	-21.85

SET PLU-	*30.30
----------	--------

3. Individual group report of dept.

YOUR RECEIPT

THANK YOU

21/09/93 17:09 11-1
123456#1126 MEYER

#112 %X1%
% GROUP %

D02	12.0000
DPT.02	%143.32
D03	88.2000
DPT.03	%1024.24
D15	2.0000
DPT.15	%9.60
GROUP01	102.2000
	%1177.16

4. Group total report

YOUR RECEIPT

THANK YOU

21/09/93 17:10 11-1
123456#1127 MEYER

#113 %X1%
% GROUP %

GROUP01	102.2000
	%1177.16
	29.15%
GROUP02	73.0000
	%413.36
	10.24%
GROUP09	26.0000
	%199.05
	4.93%
%DEPT TL	528.7650
	%4038.58
	100.00%
DEPT(-)	7.0000
	-14.30
%HASH TL	6.0000
	%18.80
HASH(-)	10.0000
	-18.75
%BTTL TL	6.0000
	%24.20
BTTL(-)	8.0000
	-21.85

5. PLU report by designated range

- Sample X1 report

YOUR RECEIPT
THANK YOU

21/09/93 17:10 11-1
123456#1128 MEYER

#120 %*1%
% PLU %

0001-	0020	Range
F*0001	8.0000	
PLU0001	*50.05	
F*0002	17.0000	
PLU0002	*71.20	
F*0003	25.0000	
PLU0003	*40.00	
F*0004	26.0000	
PLU0004	*509.56	
F*0005	13.0000	
PLU0005	*158.50	
F*0006	22.0000	
PLU0006	*86.08	

F*0019	10.0000
PLU0019	*235.00
F*0020	7.0000
PLU0020	*75.48
XXXTOTAL	264.5650
	*2552.83
SET PLU-	*30.30
%SET PLU %	
F*0011	3.0000
PLU0011	*30.30
XXXTOTAL	3.0000
	*30.30

6. PLU report by assigned dept.

- Sample X1 report

YOUR RECEIPT
THANK YOU

21/09/93 17:10 11-1
123456#1129 MEYER

#121 %*1%
% PLU %

DPT.02	D02	Dept. no.
F*0002	17.0000	
PLU0002	*71.20	
F*0003	25.0000	
PLU0003	*40.00	
F*0007	10.1260	
PLU0007	*81.76	
F*0009	7.0630	
PLU0009	*16.00	
F*0010	74.0630	
PLU0010	*1172.66	
XXXTOTAL	133.2520	
	*1381.62	
SET PLU-	*30.30	
%SET PLU %		
XXXTOTAL	0.0000	
	*0.00	

7. PLU stock report

YOUR RECEIPT
THANK YOU

21/09/93 17:11 11-1
123456#1130 MEYER

#124 *X<1*
* STOCK *

0001- 0010

Range

F*0001	
PLU0001	1.500S
F*0002	
PLU0002	1.220S
F*0003	
PLU0003	0.800S
F*0004	
PLU0004	1.580S
F*0005	
PLU0005	1.368S
F*0006	
PLU0006	11.000S
F*0007	
PLU0007	63.874S
F*0008	
PLU0008	0.687S
F*0009	
PLU0009	1.437S
F*0010	
PLU0010	0.937S

8. Transaction report

• Sample X1 report

YOUR RECEIPT

THANK YOU

21/09/93 17:11 11-1
123456#1131 MEYER

#130 *X1*
* TRANS. *

*DEPT TL	691.7650
	*7089.46
DEPT(-)	7.0000
	-14.30
*HASH TL	4.0000
	*12.50
HASH(-)	11.0000
	-35.75
*BTTL TL	4.0000
	*14.70
BTTL(-)	10.0000
	-25.85

(-)>2	30
	-0.25
(-)>4	10
	-2.00
SET PLU-	*90.90
*2	20
	*0.00
*4	20
	-9.80

NET1 *7051.96

DIFFER	*0.00
TAX1 ST	*154.69
VAT 1	*3.22
TAX2 ST	*91.16
VAT 2	*6.07
TAX3 ST	*328.30
VAT 3	*0.55

TTL TAX	*9.84
NET	*7042.12
NET2	*7061.80

(-)>1	40
	-3.00
(-)>3	20
	-4.50
*1	20
	-1.34
*3	20
	-4.35
CP PLU	40
	-48.45

REFUND	50
	*49.50
*	210
	*92.36
* MODE	10
	*60.00
MGR *	20
	*60.00
SETL *	90
	*2180.97
HASH *	30
	*25.50
HASH RF	20
	*6.30

VP CNT	210
SLIP CNT	00
NO SALE	70
XXXPEAL	20
XXXNBAL	20
G.C. CNT	30
GUEST	2310

ORDER TL	*7038.55
PAID TL	*7038.55
AVE.	*30.47
O-P	*0.00
XXXRA	40
	*72.50
XXXRA2	10
	*25.00
XXXPD	40
	*61.00
XXXPD2	30
	*75.00

CA/CHK	10	
		*20.00
CASH	1440	
		*4559.83
CASH2	180	
		*333.54
CHECK	70	
		*83.70
CREDIT1	240	
		*678.79
CREDIT2	130	
		*367.89
CREDIT3	30	
		*177.95
CREDIT4	10	
		*88.30
CREDIT5	10	
		*91.35
CREDIT6	20	
		*70.95
CREDIT7	20	
		*22.30
CREDIT8	140	
		*415.80
EXCH1	20	
		55.00
DOM.CUR1		*22.26
EXCH2	10	
		26.60
DOM.CUR2		*47.50
EXCH3	20	
		47.01
DOM.CUR3		*60.10
EXCH4	10	
		26.16
DOM.CUR4		*43.60
XXXXCID		*4859.06
*CH ID		*34.20
CA/CH ID		*4933.26
CHK/CG		*3.05

9. Total in drawer report

YOUR RECEIPT

THANK YOU

21/09/93 17:11 11-1
123456#1132 MEVER

#131 *2<1*
* TL-ID *

EXCH1	20
	55.00
DDM.CUR1	*22.26
EXCH2	10
	26.60
DDM.CUR2	*47.50
EXCH3	20
	47.01
DDM.CUR3	*60.10
EXCH4	10
	26.16
DDM.CUR4	*43.60
XXXXCID	*4349.12
*CH ID	*66.20
CA/CH ID	*4455.32

10. Cashier report

(1) Individual cashier report

- Sample X1 report

YOUR RECEIPT
THANK YOU

21/09/93 17:12 11-1
123456#1133 MEYER

#151 *X1*
XCASHIER *

01CSR#11	MEYER
PAID TL	*6852.38
REFUND	30
	*40.00
	180
	*82.86
MODE	10
	*60.00
MGR "	00
	*0.00
SBTL "	90
	*2180.97
G.C. CNT	00
GUEST	2150
XXXRA	40
	*72.50
XXXRA2	10
	*25.00
XXXPD	40
	*61.00
XXXPD2	30
	*75.00
CA/CHK	10
	*20.00
CASH	1340
	*4621.53
CASH2	160
	*315.25
CHECK	70
	*83.70
CREDIT1	210
	*467.75

- Sample OP X report

YOUR RECEIPT
THANK YOU

21/09/93 17:12 11-1
123456#1134 MEYER

#051 *OP2*
XCASHIER *

The subsequent printout occurs in the same format as in the sample X1 report.

CREDIT8	140
	*415.80
EXCH1	20
	55.00
DOM.CUR1	*22.26
EXCH2	10
	26.60
DOM.CUR2	*47.50
EXCH3	20
	47.01
DOM.CUR3	*60.10
EXCH4	10
	26.16
DOM.CUR4	*43.60
***XCID	*4902.47
*CH ID	*34.20
CA/CH ID	*4976.67
CHK/CG	*3.05

(2) Full cashier report

• Sample X1 report

YOUR RECEIPT

THANK YOU

21/09/93 17:12 11-1
123456#1135 MEVER

#150 **1*
XCASHIER *

01CSR#11 MEVER
PAID TL \$6852.38
REFUND 30
\$40.00
\$180
\$82.86

XXXXCID \$4902.47
XCH ID \$34.20
CA/CH ID \$4976.67
CHK/CG \$3.05

02CSR#02
PAID TL \$4302.46

XXXXCID \$3744.24
XCH ID \$206.45
CA/CH ID \$3950.69
CHK/CG \$0.00

03CSR#03
PAID TL \$5941.38

XXXXCID \$5637.74
XCH ID \$50.29
CA/CH ID \$5688.03
CHK/CG \$0.00

04CSR#14
PAID TL \$4537.29

XXXXCID \$3966.98
XCH ID \$276.64
CA/CH ID \$4243.62
CHK/CG \$0.00

XXXTOTAL
PAID TL \$21633.51

XXXXCID \$18251.43
XCH ID \$567.58
CA/CH ID \$18859.01
CHK/CG \$3.05

11. Hourly report

- Sample X1 report

YOUR RECEIPT	
THANK YOU	
21/09/93 17:13 11-1	
123456#1136 MEVER	
#160 *X1*	
* HOURLY *	
11:00	200
	*799.45
AVE.	*39.97
11:30	220
	*1380.47
AVE.	*62.75
SUBTOTAL	420
	*2179.92
12:00	230
	*1649.55
AVE.	*71.72
12:30	290
	*1440.93
AVE.	*49.69
SUBTOTAL	520
	*3090.48

AVE.	*13.44
SUBTOTAL	540
	*865.15
21:00	360
	*517.00
AVE.	*14.36
SUBTOTAL	360
	*517.00

12. Daily net report

- Sample X2 report

YOUR RECEIPT	
THANK YOU	
25/09/93 17:13 11-1	
123456#1138 MEVER	
#270 *X2*	
* DAILY *	
21/09	4270
	*21633.51
22/09	3990
	*23992.05
23/09	4070
	*29010.32
24/09	2140
	*17324.81
25/09	2040
	*20112.75
***TOTAL	16510
	*112073.44

COMPULSORY CASH/CHEQUE DECLARATION

1. If your machine has been programmed for compulsory cash/cheque declaration, you must declare cash/cheque in drawer in advance according to the type of the declaration when you take cashier Z reports.

Use the procedure shown in 3 below for this declaration.

2. Types of compulsory cash/cheque declaration

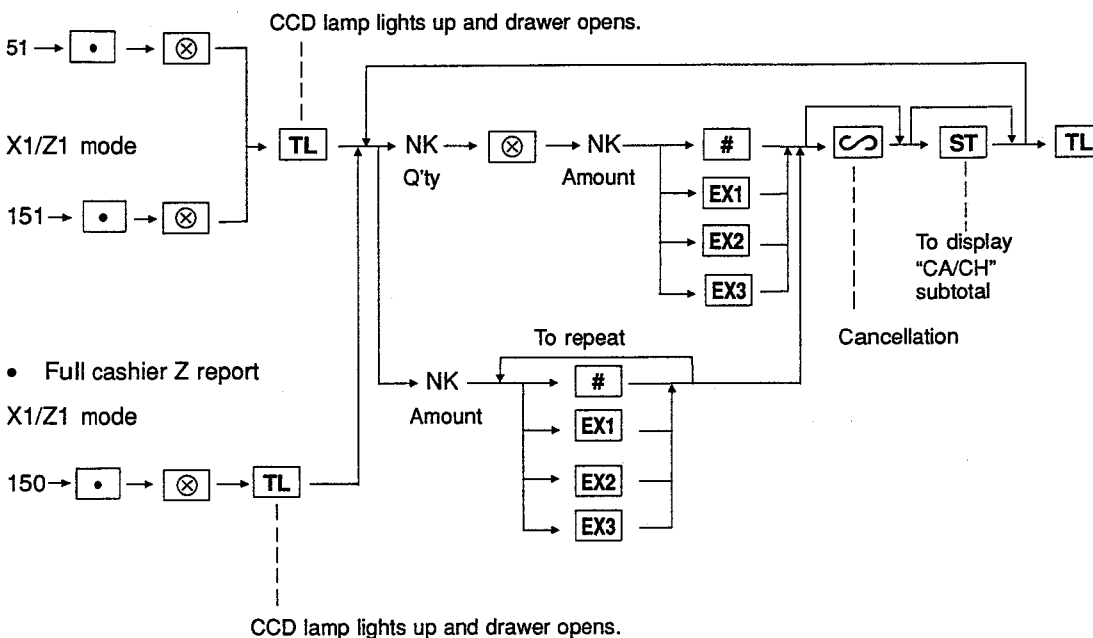
- (1) Compulsive when individual cashier resetting is taken
- (2) Compulsive when full cashier resetting is taken

Note: Compulsory cash/cheque declaration is available in the above two types. You can choose either of these. Consult your local dealer for details.

3. Key operation

- Individual cashier Z report

OP X/Z mode



: For CA/CH ID, EX1 - EX3 : For foreign currency ID

YOUR RECEIPT

THANK YOU

21/09/93 17:13 11-1
123456#1140 MEYER

#151 *Z1*
*CCD *

CA/CH IS	*15580.17
EXCH1 IS	55.00
EXCH2 IS	26.60
EXCH3 IS	47.01

— CCD entry amount

*CASHIER *

O1CSR#11	MEYER
PAID TL	*17986.13
REFUND	30
	*40.00

CREDIT8	140
	*415.80

EXCH1	20
	55.00

— EXCH1 in drawer to be obtained

DDM.CUR1	*22.26
----------	--------

EXCH1 IS	55.00
----------	-------

— Total of entered (declared) EXCH1 in drawer

CCD DIF.	0.00
----------	------

— Difference

EXCH2	10
	26.60

DDM.CUR2	*47.50
----------	--------

EXCH2 IS	26.60
----------	-------

CCD DIF.	0.00
----------	------

EXCH3	20
	47.01

DDM.CUR3	*60.10
----------	--------

EXCH3 IS	47.01
----------	-------

CCD DIF.	0.00
----------	------

EXCH4	10
	26.16

DDM.CUR4	*43.60
----------	--------

***CID	*15333.07
--------	-----------

— Cash in drawer to be obtained

*CH ID	*207.20
--------	---------

— Cheque in drawer to be obtained

CA/CH ID	*15580.27
----------	-----------

— Cash/cheque in drawer to be obtained

CA/CH IS	*15580.17
----------	-----------

— Total of entered (declared) cash/cheque in drawer

CCD DIF.	-0.10
----------	-------

— Difference

DIF. TL	-0.10
---------	-------

— Total of difference

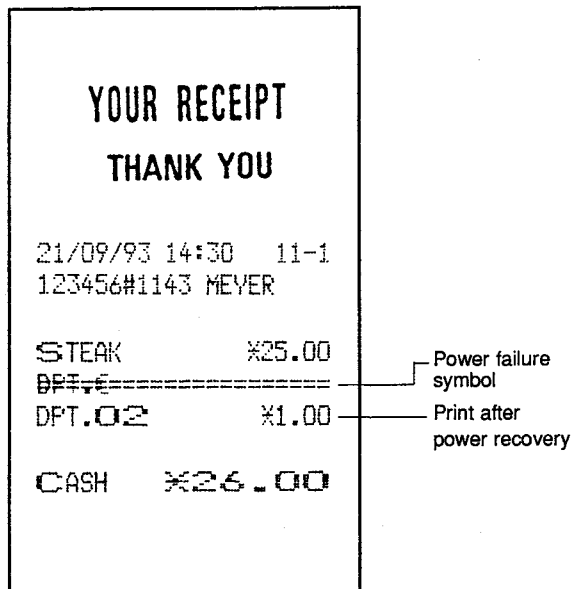
CHK/CG	*3.05
--------	-------

OPERATOR MAINTENANCE

1. In case of power failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- (1) When power failure is encountered in register idle state or during an entry, the machine returns to the normal state of operation after power recovery.
- (2) When power failure is encountered during a printing cycle the register prints "======" and then carries out the correct printing procedure. (See the sample print.)



2. In case of printer's motor locking

If the printer's motor happens to lock, the printing stalls, display disappears, and intermittent bleeping starts. You must, first of all, turn the power switch off, cut the power supply, and repair the paper jam. And then, when switched on, the following format appears in the display.

"-----"

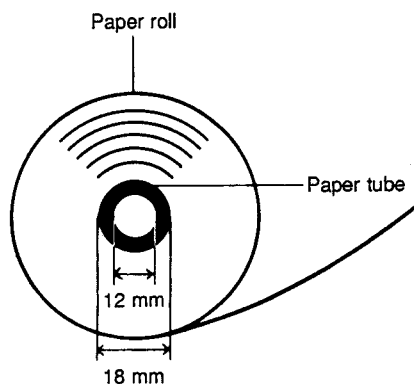
Feed the roll paper to the proper position and depress the **CL** key. The register carries out the power failure symbol and continues printing.

3. Paper roll near-end sensing function (only for journal paper) <option>

When the journal paper roll comes near the end or is not loaded, the machine senses this condition and sounds an alarm, displaying the error code "E04". At this time, clear the alarm with the **CL** key and replace the paper roll as soon as possible.

The following entry can be made after clearing the alarm. However, since this function works each time one transaction is completed, the alarm sound will be emitted again as the following transaction is completed unless the paper roll is replaced.

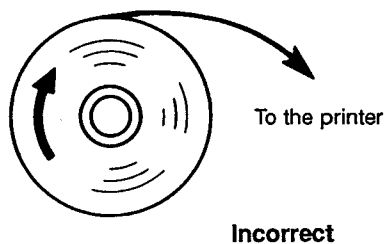
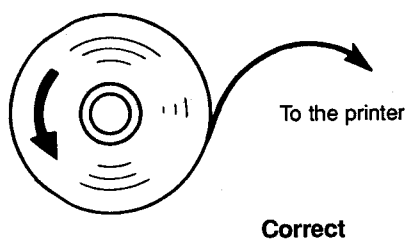
- The sensing position depends upon the size of the paper tube. Therefore, it is advisable to use paper rolls – whose paper tube is 18 mm in O.D. and 12 mm in I.D. – specified by SHARP.
- If the sensing occurs too early or late, contact your dealer.



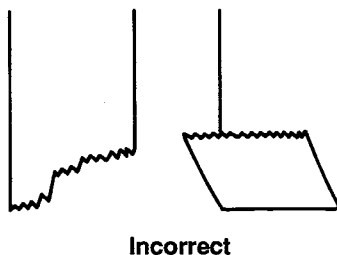
4. Installing and removing the paper roll

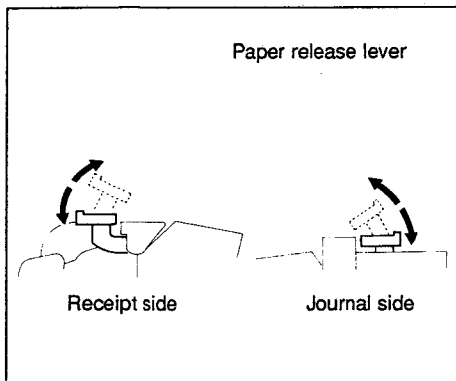
Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

(How to set the paper roll)



(How to cut the paper end)

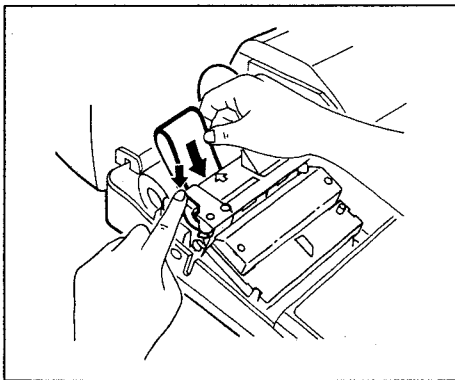




To remove a paper jam, pull the paper release lever.
To release the paper, press the lever down.

4-1. Installing the paper roll

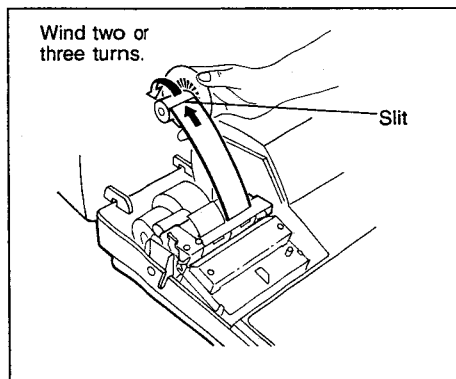
• Installing the receipt paper roll



- (1) Open the printer cover.
Set the paper roll correctly as illustrated and drop it into the printer.
- (2) Press the receipt paper release lever down and insert the paper end into the paper chute of the printer. Pull the paper end that has come out of the printer, holding down the lever.
- (3) Advance the paper by a required length by pressing the receipt paper feed key.

Note: Make sure the ink ribbon cassette has been mounted on the printer when installing the receipt paper roll.

• Installing the journal paper roll



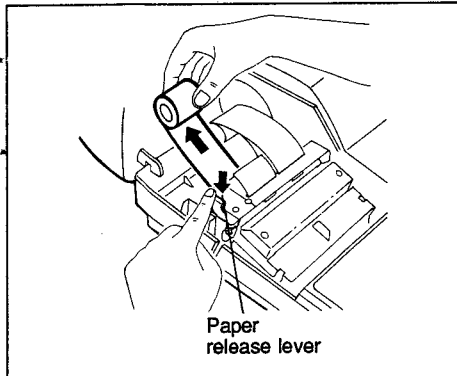
- (1) Open the printer cover.
Set the paper roll correctly and drop it into the printer.
- (2) Press the journal paper release lever down, insert the paper end that has come out of the printer, into the slit in the paper take-up spool, wind it two or three turns around the spool shaft, and set the spool on the bearing.

4-2. Removing the paper roll

When a red dye appears on the paper roll, it is time to replace the existing paper roll.

Replace the paper roll with a new one.

• Removing the receipt paper roll

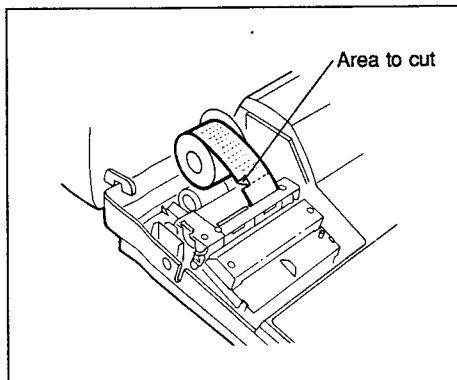


(1) Open the printer cover.

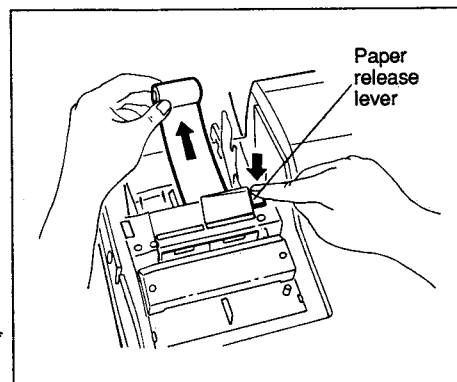
(2) Press and hold the receipt paper release lever down and draw out the existing paper roll from the paper roll location.

Note: Be sure to pull the roll in the direction of the arrow.

• Removing the journal paper roll

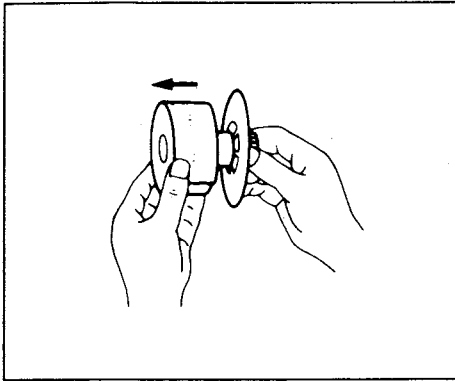


(1) Press the journal paper feed key to advance the paper by several lines and then cut it.

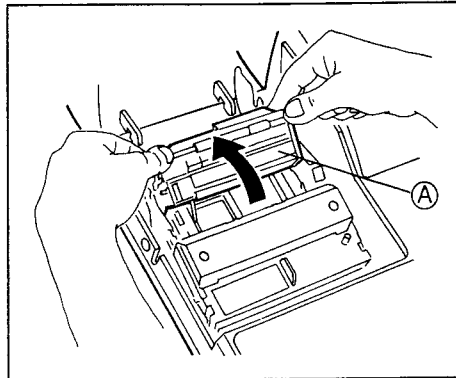
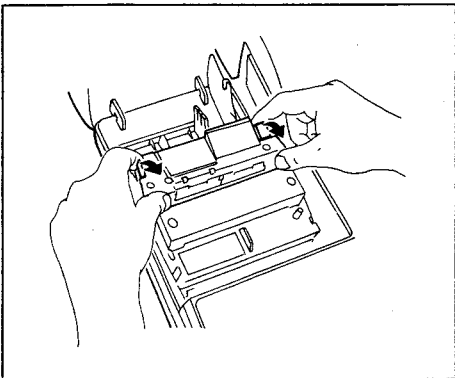


(2) Press and hold the journal paper release lever down and remove the existing paper roll from the paper roll location.

Note: Be sure to pull the roll in the direction of the arrow.



(3) Remove the paper roll from the take-up spool.



Pulling the receipt and journal paper release levers at a time, lift part (A) up. Remove a paper jam and replace part (A) gently.

Request

Be sure to use paper rolls specified by SHARP.

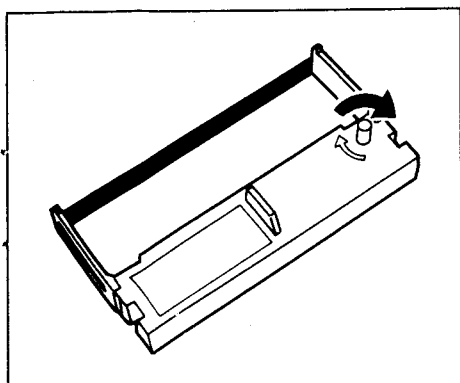
The use of any other paper rolls than specified could cause paper jamming, resulting in register malfunction.

Paper specification

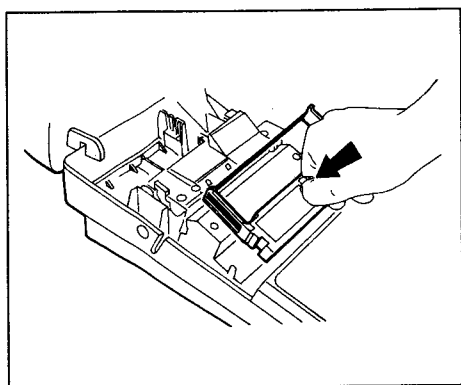
Paper width:	44.5 ± 0.5 mm
Max. outside diameter:	80 mm
Weight:	52.3 – 64.0 g/cm ² (45 – 55 kg/1000 sheets/788 x 1091 mm ²)
Quality:	bond paper
Paper tube:	18 mm

- Be sure to set paper roll(s) prior to using your machine, otherwise it could malfunction.

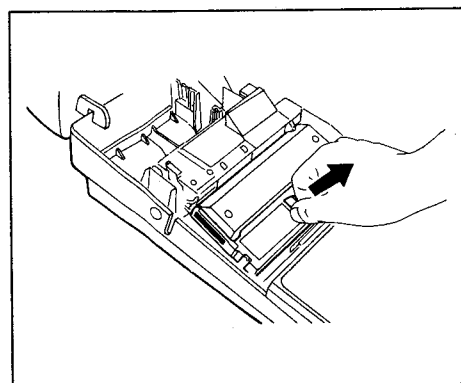
5. Installing the ink ribbon cassette



- (1) Open the printer cover and the ribbon cover.
- (2) Rotate the knob on the ink ribbon cassette in the direction of the arrow to stretch the ribbon tight.



- (3) Put the ink ribbon cassette in the location indicated in the figure at left and fix it by using the right and left pawls.
- (4) Rotate the knob two or three turns in the direction of the arrow to make sure it rotates smoothly. Also, make sure the ribbon is not folded.

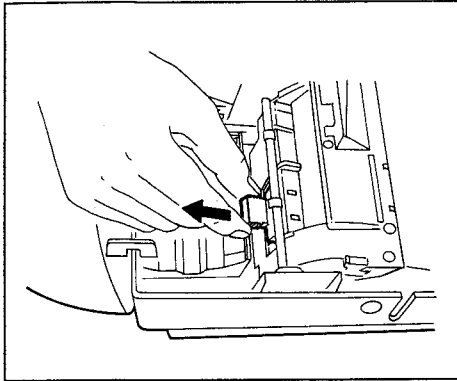


- (5) To remove the cassette, lift it up.

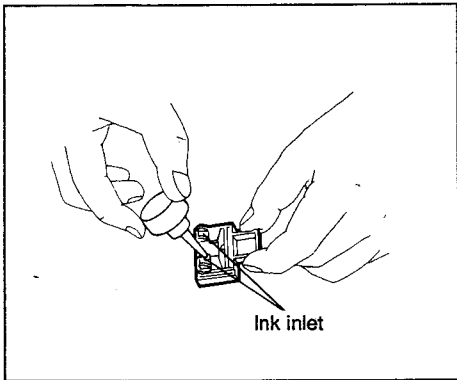
Request: Be sure to use ink ribbon cassettes specified by SHARP. The use of any cassettes other than specified could cause troubles in the printer.

6. Ink refill

If the logo becomes too light, refill it with the supplied logo ink following the procedure given below.



- (1) Open the printer cover.
- (2) Remove the store name logo by pulling it in the direction of the arrow.



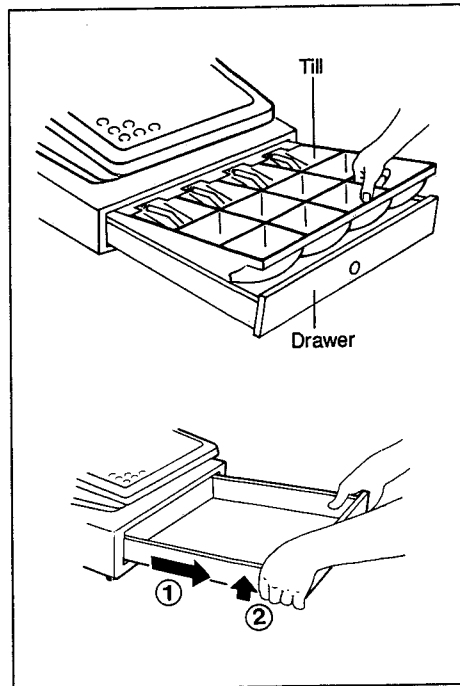
- (3) Pour two or three drops of logo ink through the ink inlet situated on the back of the logo.
- (4) Replace the logo by the reverse procedure of removing.
- (5) Shut the printer cover.

Precautions

1. The logo ink first gives a clear print 10 to 15 hours after being poured into the logo. Therefore, refilling after the daily business is most effective.
 2. Overinking should be avoided. This will create a blurry print.
 3. The ink is exclusively used for the logo.
Do not apply the ink to the ink ribbon and ink roller.
- * When the supplied ink is exhausted, purchase the logo ink specified by SHARP.

7. Removing the till and the drawer

The till in the register is detachable. After closing your business for the day remove the till from the drawer and keep the drawer open. This will prevent money from being stolen. To detach the drawer, pull it forward fully with the till removed, and draw it out by lifting it up.



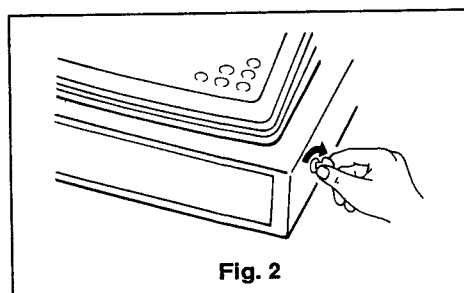
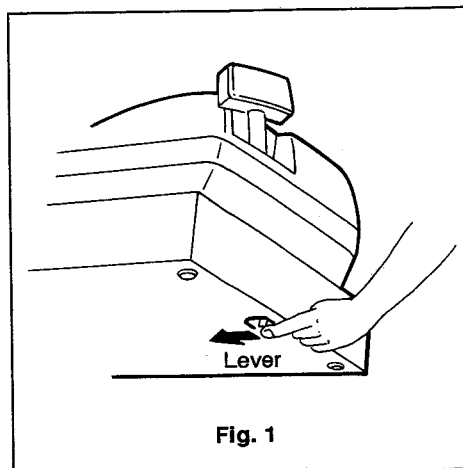
8. Opening the drawer by hand

The drawer automatically opens in the usual way, however, when power failure is encountered or the machine becomes out of order, open the drawer by following the procedure below.

Push the lever in the opening located on the machine bottom toward the front. (See Fig. 1.) However, the drawer will not open, if it is locked.

(For the set delivered to the U.K. or Australia)

Insert the key into the drawer lock and turn it 90 degrees clockwise. (See Fig. 2.)



9. Before calling for service

The malfunctions shown in the left-hand column below, labeled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to the "Checking" shown in the right-hand column before calling for service.

Fault	Checking
(1) The display won't be illuminated even when the mode switch is turned to any other position than "⏻".	<ul style="list-style-type: none">• Is power supplied to the electric outlet?• Is the power cord plug out or loosely connected to the electrical outlet?• Is the power switch in the "ON" position?
(2) The display is illuminated, but the whole machine refuses entries.	<ul style="list-style-type: none">• Is the cashier key held down or inserted?• Is the mode switch set properly at the "REG" position?
(3) No receipt is issued.	<ul style="list-style-type: none">• Is the receipt paper roll properly installed?• Is there a paper jam?• Is the receipt ON-OFF switch in the "OFF" position?
(4) No journal paper is taken up.	<ul style="list-style-type: none">• Is the take-up spool installed on the bearing properly?• Is there a paper jam?
(5) Printing is unusual.	<ul style="list-style-type: none">• Is the ink ribbon cassette installed properly?• Is the ink ribbon's life completed?

– Program resetting –

When the program resetting is performed, the register returns to the initial state with the memories all kept intact. If you need this function please contact your local dealer.

< Procedure >

- 1) Set the power switch to the OFF position.
- 2) Turn the mode switch to the "PGM2" position.
- 3) Set the power switch to the ON position, keeping the receipt paper feed and journal paper feed keys depressed.

After the operation the printer prints "PRG. RESET ***" on the journal.

If the register still malfunctions even after program resetting, contact your local dealer.

LIST OF OPTIONS

For your ER-A550, the following options are available.

Do not try to install any options yourself.

For details, contact your dealer.

1. RAM memory chip model ER-01RA/02RA (32KB/128KB)
2. Remote drawer model ER-02DW
3. Till model ER-38CC and till cover model ER-38CV1/CV2/CV3/CV4/CV5
4. 2 port RS232C interface model ER-A5RS
5. IRC and RS232C interface model ER-A5IN
6. RS232C and inline control ROM model ER-A55R1
(If you use slip printer or manual PB+/PB-, you need this ROM.)
7. Slip printer model ER-31SP
8. Remote printer model ER-02RP
9. Connection cable (ECR to ECR) model ER-A5CB
10. One hole cashier switch model ER-A5CL

SPECIFICATIONS

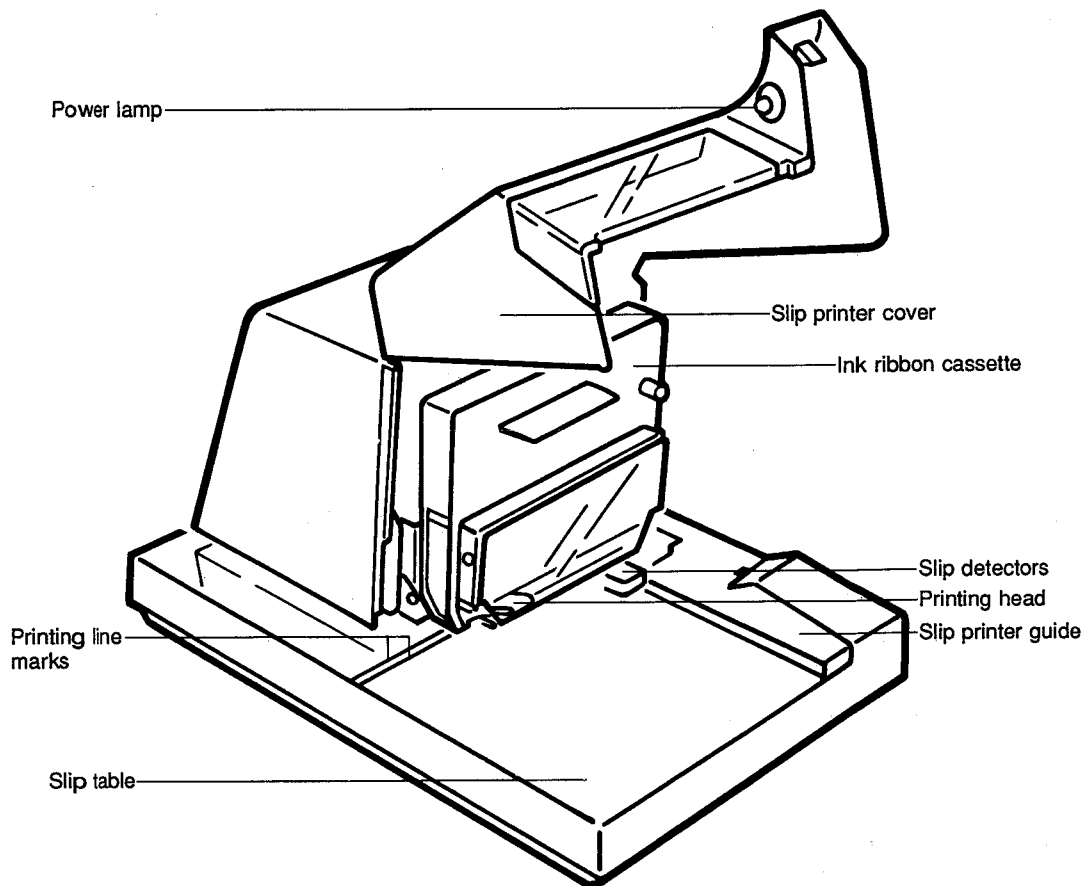
Model:	ER-A550		
External dimensions:	440 (W) x 496 (D) x 323 (H) mm		
Weight:	16.8 kg 17 kg (the set delivered to the U.K. or Australia)		
Power source:	Official (nominal) voltage and frequency		
Power consumption:	Stand-by	13 W	
	Operating	40 W	
Working temperature:	0°C to 40°C		
Electronics:	LSI (CPU), etc.		
Built-in battery:	Ni-Cd rechargeable battery, memory holding time about 1 month (with fully charged built-in battery, at room temperature)		
Display:	Operator display: 7-segment display (11 positions) Customer display: 7-segment display (7 positions)		
Printer:			
Type:	2-station serial dot-matrix (7x7 font) printer		
Printing speed:	2.5 lines/second		
Printing capacity:	21 digits each for receipt and journal paper		
Other functions:	1. Logo function 2. Receipt ON-OFF switch, journal selective function 3. Receipt and journal independent paper feed function 4. Validation printing function		
Ink ribbon:	Color:	Purple (single color)	
(Cassette type)	Width:	13 mm	
	Length:	9 meters	
Logo:	Dimensions of the printing face: 30(W) x 20(H) mm		
Paper roll:	Width:	44.5 ± 0.5 mm	
	Max. diam.:	80 mm	
	Weight:	52.3 – 64.0 g/m ² (bond paper)	
Cash drawer:	4 slots for bills, and 8 for coins		

Accessories:	Manager key	2
	Submanager key	2
	Operator key	2
	Drawer lock key	2
	Printer cover lock key	2
	Ink ribbon cassette	1
	Standard logo	1 (mounted on the printer)
	Logo ink	1 (5 cc)
	Paper roll	2
	Take-up spool	1
	Key sheet for the standard keyboard layout	1 (placed under the keyboard cover)
	Key sheet for programming	1
	Instruction manual	1 copy

* Specifications and appearance subject to change without notice for improvement.

SLIP PRINTER (OPTION) MODEL ER-31SP

1. Physical characteristics



2. Slip

2-1. Selecting slips

Slips used for the slip printer must conform to the following standard. The use of slips that do not meet the standard causes problems, such as difficult seating of them or blurry printing.

(1) Paper specifications

- Ordinary paper
- Thickness: 0.09 to 0.45 mm

(2) Form

Ordinary paper + carbon paper, or printing paper

(3) Dimensions

Width: 70 to 210 mm

Length: 90 to 297 mm

Observe the dimensions shown in illustration at right.

For details, contact your dealer.

(4) Numbering

Print numbers as shown in illustration at right.

The numbers printed in the center indicate the serial numbers of printing lines, and the numbers at the right side are used to line up the slip in order to print on the proper lines. The number 1 is printed on the 7th line from above as shown in illustration at right, and the subsequent numbers are printed on the following underlines in sequence.

Format of recommended slip

Unit: mm

The diagram shows a slip with the following structure and dimensions:

- Header:** A box containing the word "SHARP" in the center.
- Form Fields:** Below the header is a table with four columns: "DATE", "SERVER", "TABLE", and "CHECK NO.". Below these columns are 27 numbered lines (1 to 27) for printing.
- Dimensions:**
 - Width:** Indicated as "115 to 130 (W)" at the bottom.
 - Length:** Indicated as "Over 90 (L)" on the right side.
 - Top Margin:** Indicated as "Over 40" on the right side.
 - Bottom Margin:** Indicated as "Over 20" on the right side.
 - Internal Width:** Indicated as "Over 71" at the bottom.
 - Line Spacing:** Indicated as "4.2" on the right side.
- Numbering:**
 - Serial numbers 1 through 27 are printed in the center of the slip.
 - Numbers 1 through 27 are also printed on the right side of the slip, aligned with the corresponding lines.

2-2. Use of slips available in the market

Select slips which have dimensions specified in (1) and (3) of item "2-1. Selecting slips" above.

3. Printing position, alignment of slips

Every printing occurs between two red line marks (A) and (B) on the slip table.

3-1. At the use of recommended slips

Place the slip along the slip printer guide. Feed it deep into the slip printer (in the direction of arrow ①) until it touches the stopper in the table.

Printing starts on the line just above the printing line No. 1 (within the frame of table/check No.). Make sure this line is between marks (A) and (B).

If you want print on a line halfway on the slip, the slip can be inserted in the direction of arrow ② too.

3-2. Using other slips that are available on the market

Hold a slip in parallel to the slip printer guide, and align the printing area (line) with the zone between two red line marks on the slip table.

- The following method is also available.

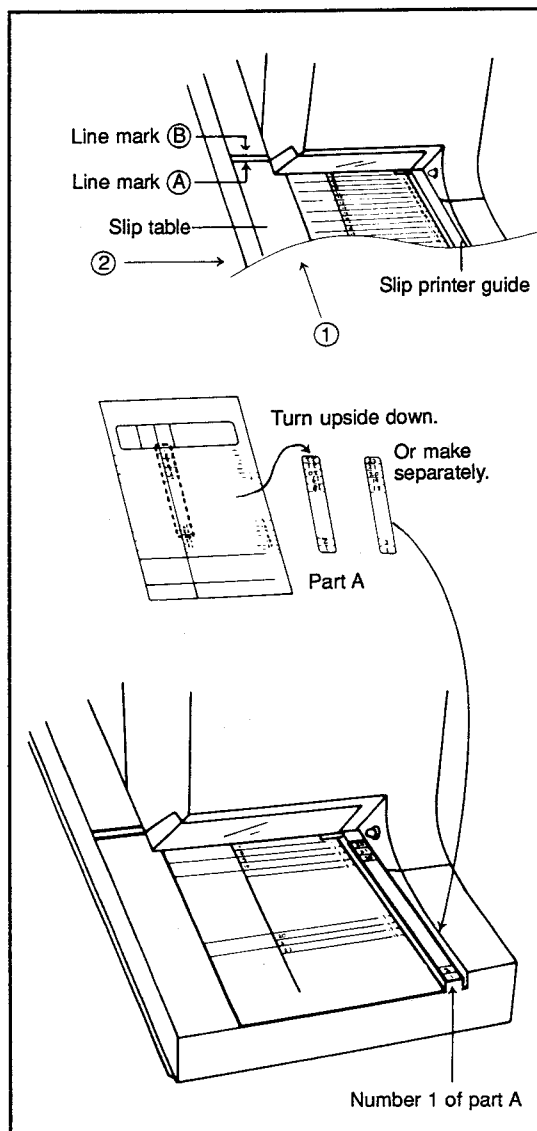
- (1) Insert a slip, and align the first printing line with the zone between line marks (A) and (B) on the slip table as to where you want the 1st line to print.

Make a notation on the slip printer guide where the bottom of the slip is located.

- (2) Cut the line numbers (part A) from the left side of the slip as shown in illustration at right.

- (3) Turn the part A cut off in step (2) above upside down, and glue it on the slip printer guide. When gluing the part A, it is necessary to align the number 1 with the notation that was made on the slip printer guide in step (1) above, which designates where the bottom of the slip is to be positioned in order to print on the 1st line of the slip. (If possible, make your own guide with the number right side up for easier reading.)

- (4) Perform the alignment for two or three lines and print to make certain part A is properly made and glued on the proper position.



4. Programming

For the outline of programming, consult the descriptions of programming (on page 18) for the ER-A550 cash register.

5. Operation

5-1. Printing transaction details on a slip

For the outline of operation, consult the descriptions of registration (on page 75) for the ER-A550 cash register.

Example using the Manual PB

① Insert a slip in the slip printer.

Hold the slip in parallel to the guide, and advance the slip deep into the slip printer until it touches the holder.

② Registration of first orders

Key operation

360 **PB+**
4

1550 **2**

NBAL

SLIP

Print

Feeding line no.

To start printing on this line, program "1" for the initial line spacing.

③ Draw out the slip after completion of printing.

When carrying out printing successively on the same side, it is not necessary to draw the slip out. It is necessary then to realign the printing line properly.

④ Registration of additional orders

Insert a slip in the slip printer, and push the slip deep into the slip printer until it touches the holder.

⑤ Same in step ③ above.

⑥ Charge registration

Insert a slip in the slip printer, and push the slip deep into the slip printer until it touches the holder.

Key operation

1910 **PB+**

31 **PLU/SUB**

NBAL

5 **SLIP**

Feeding line no.

Key operation

2190 **PB+**

ST

3000 **TL**

9 **SLIP**

When the initial line spacing has been programmed, the programmed number of line plus the specified number (5) of lines are skipped.

1. Changing the slip

↑

•

2. Slip detectors

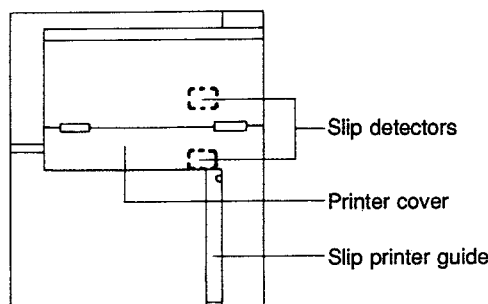
If the slip advances inward and is out of contact with the slip detectors in the course of printing, an error occurs.

In this case your register displays the error code "E25" and delivers an error alarm sound.

Meanwhile, the slip printer prints "NEXT P." on the slip and release its paper holder.

If such a situation occurs, clear the error by pressing the **CL** key, insert a new slip, and press the **SLIP** key.

The slip printer prints a header line (date, time, register no., consecutive no., and cashier code) on the slip and then prints the information which was not yet printed at the time of the error.



3. Slip printing compulsory or non-compulsory

Provided the cash register is programmed for "slip printing compulsory", the operation of the **NBAL** key or **TL**, **CA2**, **CH**, and **CR1** through **CR8** keys cannot be followed by any entry unless slip printing is executed. When the slip printing becomes in compulsory state, the machine state indicator "VP/SLIP" lights up. (The cash register is not set to "slip printing compulsory" after entering a no-sale, received money, paid-out.)

Provided the cash register is not programmed for "slip printing compulsory", no slip printing is required after each of the above-mentioned key operations.

For setting "slip printing compulsory" consult your dealer.

4. Storage capacity

Your register is designed to store entered information first and then print it when the **SLIP** key is pressed after the finalization of a transaction.

Therefore, if it stores 70 lines of information, its storage capacity is fully used.

When the machine has been programmed for slip printing compulsory, the slip printing must be done at the "compulsory" set point.

If you make further entries under such a situation, an error occurs.

When the machine has been programmed for slip printing non-compulsory, no further registration will not be stored. Registrations can be continued, however. If the slip printing is made after the termination of registration, the items will not be printed, but the total amount along.

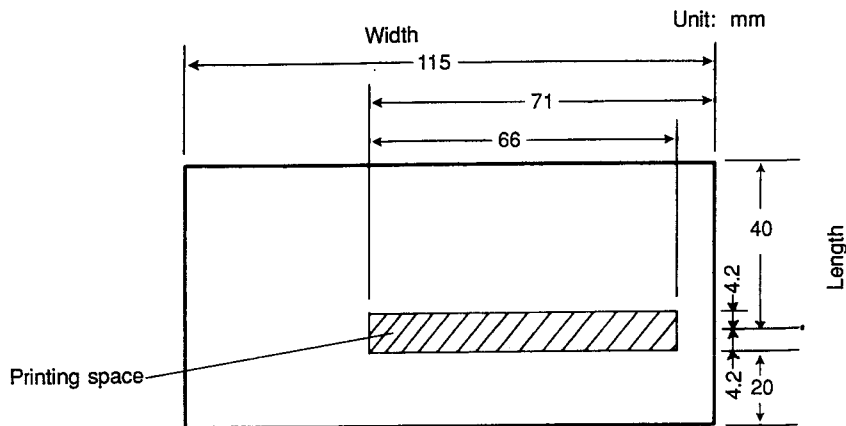
5-2. Validation printing

Connecting a slip printer to your register prevents its built-in printer from performing validation printing. Carry out validation printing by use of the slip printer.

After item entries or finalized transaction hold a validation slip to the slip guide, align with the printing line mark the area to print the information on, then press the **VP** key. This achieves validation printing.

- Validation paper specifications and printing position

Paper quality and thickness of validation slips must be the same as those of common slips. Observe the dimensions shown in the illustration below. The hatched area is printing space.



6. Mounting the ink ribbon cassette

1. For safety precautions, unplug your register.
2. Open the slip printer cover by pulling it towards you.
3. Mount the ink ribbon cassette on the printer.

Be sure to observe the instructions.

- Run the ink ribbon over the ink ribbon guide spring, under the printing head, and over the ink ribbon guide. (See Fig. 1.)

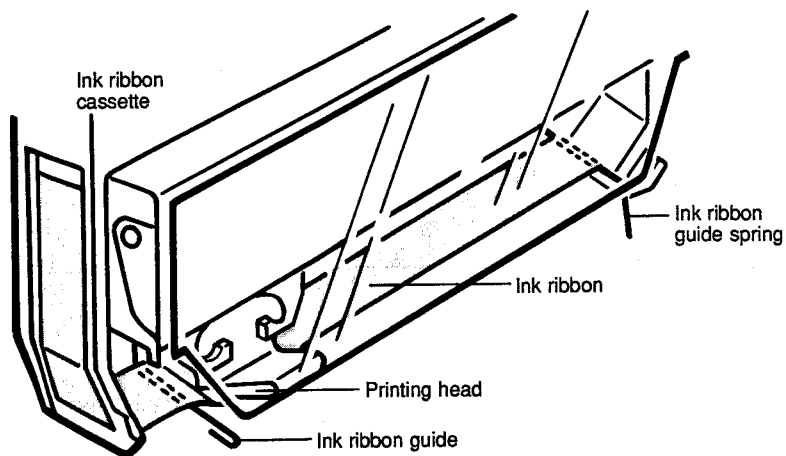


Fig. 1

- Perfectly fit the four protuberances on the back of the ink ribbon cassette into the corresponding four holes of the printer. (See Fig. 2.)

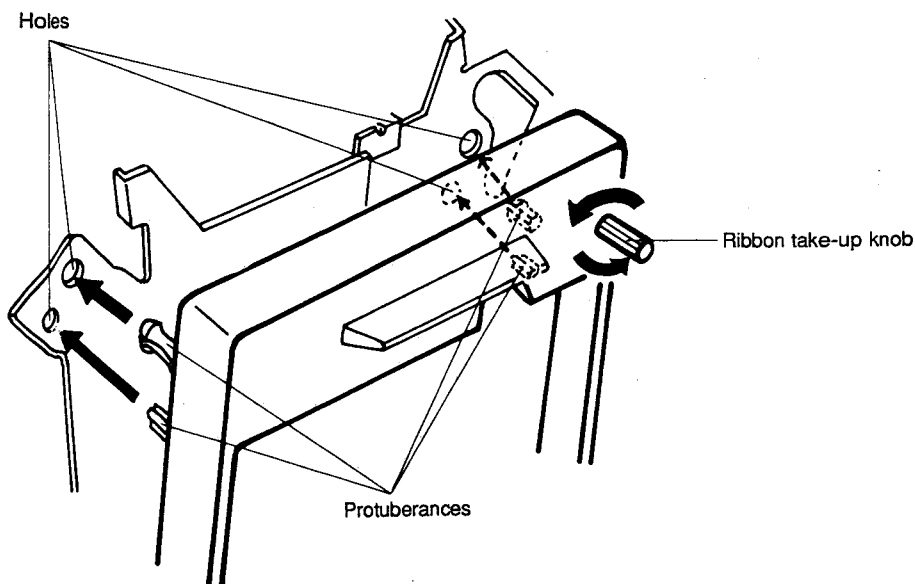


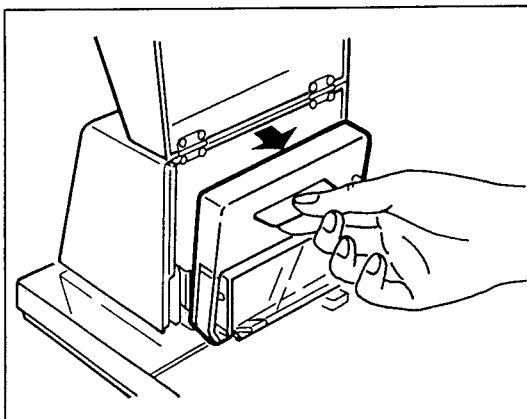
Fig. 2

4. Rotate the ribbon take-up knob in the direction of the arrow to tense the ink ribbon. (See Fig. 2.)
5. Close the slip printer cover.

7. Replacing the ink ribbon cassette

When printing becomes faint, replace with a new slip printer ink ribbon cassette specified by SHARP.

- (1) For safety precautions, unplug your register. Open the slip printer cover by pulling upward.
- (2) Remove the existing ink ribbon cassette. Hold the knob at the center and pull the cassette toward you. (See the figure at right.)
- (3) Install a new ink ribbon cassette according to the procedure given in "Mounting the ink ribbon cassette" on page 147.
- (4) Close the slip printer cover.



8. Before calling for service

The malfunctions shown in left-hand column below, labeled "Problem", do not necessarily indicate a malfunction of the slip printer. It is therefore advisable to refer to the "Check" shown in the right-hand column before calling for service.

Problem	Check
1. Any slip cannot be inserted.	<ul style="list-style-type: none"> Does the thickness of the slip satisfy the specification? Is the printer in the "release" condition? If the printer is not in the "release" condition, perform the following operation. Turn the mode switch of your register to the PGM position, then press the SLIP key. Look for paper jam.
2. The slip swerves at printing.	<ul style="list-style-type: none"> Does the slip meet the specification?
3. No printing	<ul style="list-style-type: none"> Is the slip inserted properly or is it in contact with the detectors? No faulty operation? Is the ink ribbon cassette fitted properly? Does the ink ribbon lack enough ink?

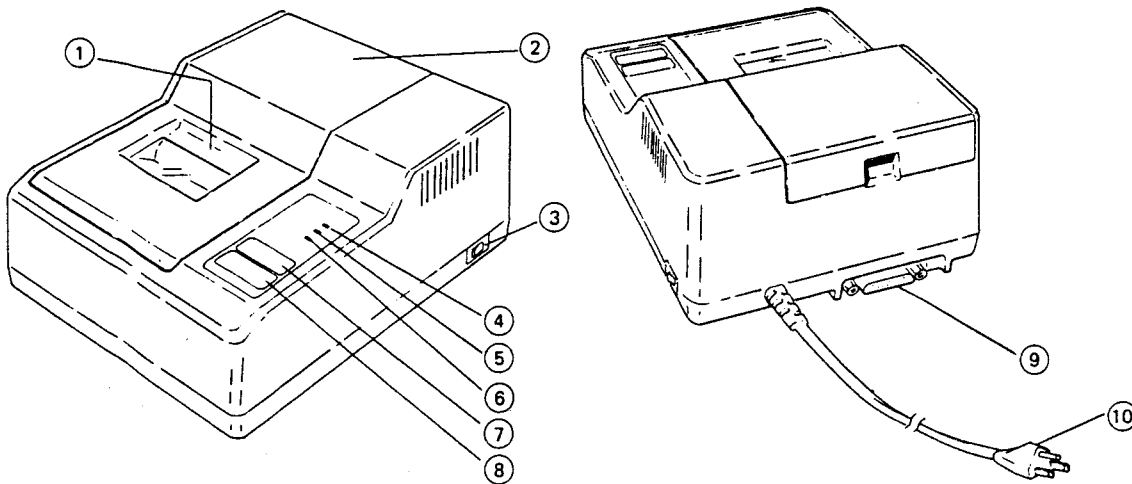
If your printer still fails to work after the checking above, ask your dealer for servicing.

9. Specifications

Model:	ER-31SP
External dimensions:	188 (W) x 265 (D) x 158 (H) mm
External dimensions of slip table:	136 (W) x 258 (D) mm
Weight:	3.8 kg
Operating temperature:	0°C to 40°C
Printing system:	Serial dot-matrix (7 x 7 font) printer
Printing speed:	Approx. 2.4 lines/sec.
Print column capacity:	35 columns
Allowable dimensions of slip:	70 (W) x 90 (L) mm to 210 (W) x 297 (L) mm
Allowable thickness of slip:	0.09 to 0.45 mm
Ink ribbon:	Housed in an endless cassette, purple in color
Accessories:	Ink ribbon cassette 1 pc. Test slip paper 2 sheets

KITCHEN PRINTER (OPTION) MODEL ER-02RP

1. Physical characteristics



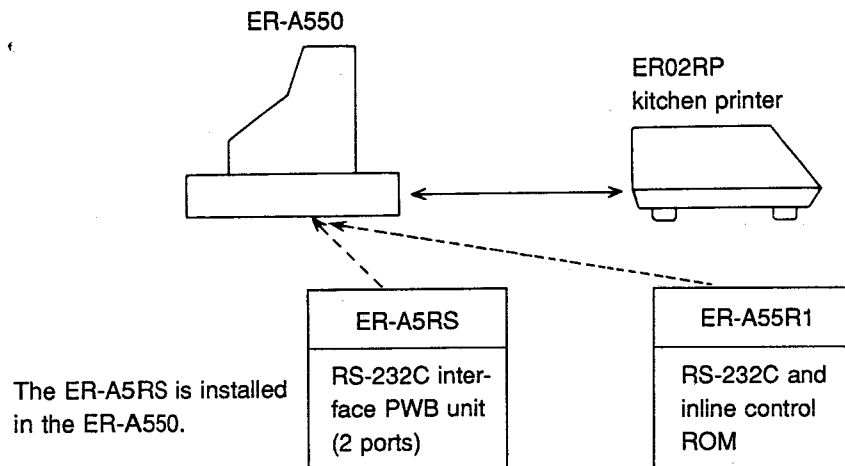
- ① Paper outlet – the printed receipt comes out here.
- ② Printer cover – serves to protect the printer against dust and to reduce the noise level of the printer. Install this cover correctly on the printer.
- ③ Power switch – turns the ER-02RP on and returns its print head to the home position.
- ④ POWER lamp – lights up when the power switch is set to the ON position, and goes off when the switch is set to the OFF position.
- ⑤ ON LINE lamp – lights up when the ER-02RP enters the on-line mode; and goes off when it enters the off-line mode, the ER-02RP can print data only when this lamp is lit.
- ⑥ ALARM lamp – lights up when the kitchen printer malfunctions. In this case the printer neither prints any data nor feeds the paper. The alarm state can be cleared by pressing the ON LINE switch or by setting the power switch to the OFF position and then back to the ON position.
- ⑦ ON LINE switch – allows the printer to enter the on-line or off-line mode. If this switch is pressed while the printer is printing, it prints out all of the input buffer data and then enters the off-line mode.
- ⑧ LINE FEED switch – feeds the paper when the ER-02RP is in the off-line mode.
- ⑨ Interface connector – used to connect the ER-02RP to the ER-A550. Before connecting, make sure to turn off the ER-02RP and unplug the ER-A550. The ER-A550 must be unplugged because the ER-02RP is energized even when it is in the OFF mode.
- ⑩ Power plug – connected to a specified electrical outlet.

2. System configuration

This system is intended for data communications between the ER-A550 Electronic Cash Register and the ER-02RP Kitchen Printer in a restaurant or the like; it enables the ER-A550 to transmit orders from customers in the dining room to the ER-02RP in the kitchen.

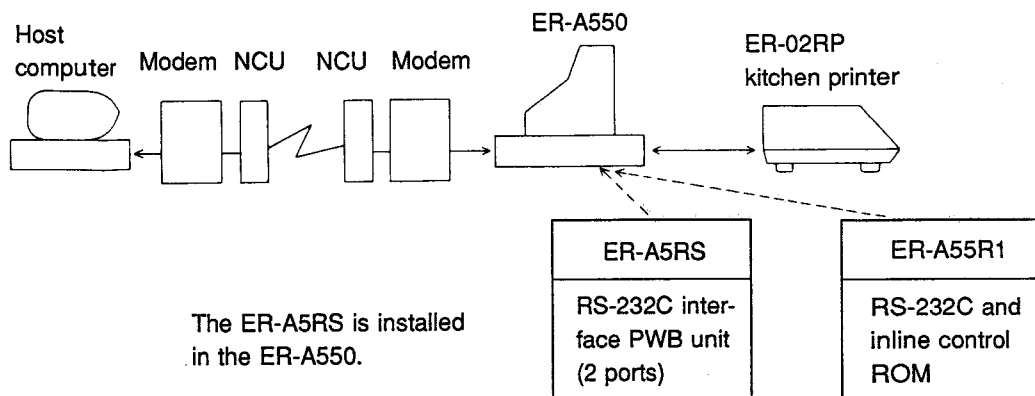
This system is available in the following two configurations:

(1) Connection of the ER-A550 and the ER-02RP



(2) Connection of an on-line data communication system and the ER-02RP

Both the ER-02RP kitchen printer and a host computer can be connected to the ER-A550. (Both cannot be operated simultaneously.)



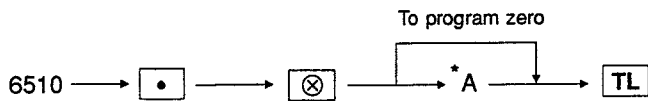
Note: For the ER-02RP cable and the modem, consult your dealer.

3. Programming

3-1. Programming whether to enable or disable the data transmission to the kitchen printer (PGM2 mode)

With this programming you can select whether to enable or disable the ER-A550 to transmit data to the ER-02RP kitchen printer.

Procedure

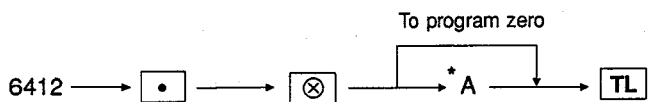


*A: Data transmission to the kitchen printer; Enable/Disable = 1/0

Key operation	Print
6510 • ⊗ 1 TL	<pre>#6510 XPGM2X K.P PROGRAM 1</pre>

3-2. Programming of the transmission data rate (baud rate) (PGM2 mode)

Procedure



* A: Baud rate

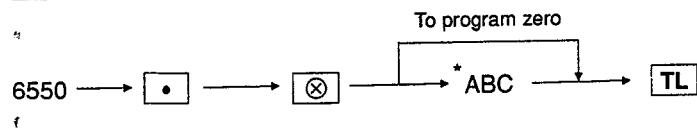
300 bps = 0	600 bps = 1
1200 bps = 2	2400 bps = 3
4800 bps = 4	9600 bps = 5

Key operation	Print
6412 • ⊗ 3 TL	<pre>#6412 XPGM2X BPS 3</pre>

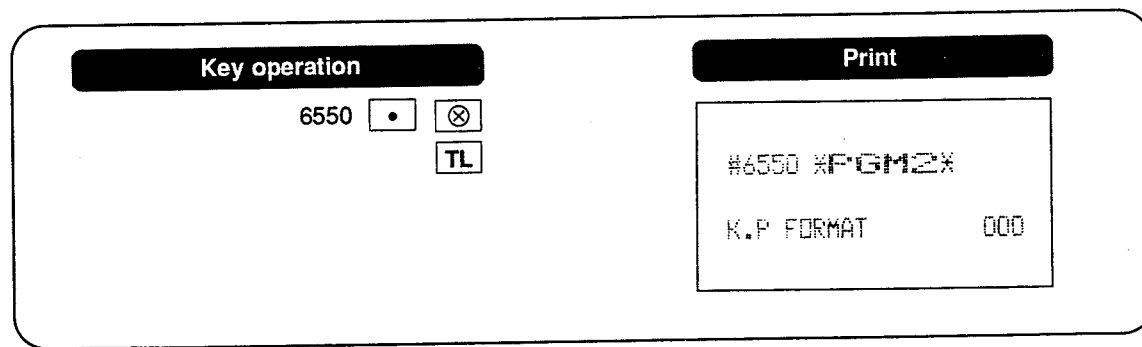
3-3. Programming to decide whether to skip the PLU/department code, unit price, and/or total amount during printing on the kitchen printer (PGM2 mode)

You can program the ER-A550 to cause the kitchen printer to skip the PLU/department code, unit price, and/or total amount.

Procedure



- * A: PLU/department code ; Skip/Print = 1/0
- B: Unit price ; Skip/Print = 1/0
- C: Total amount ; Skip/Print = 1/0

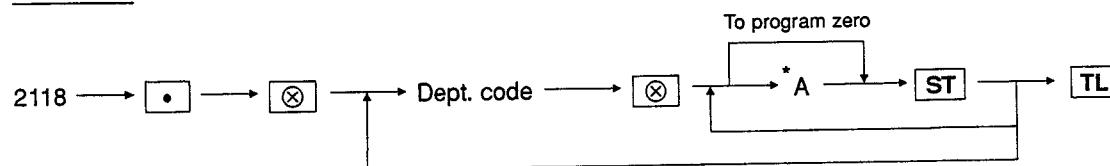


3-4. Programming of print stations (PGM2 mode)

① Programming of print stations for department data (job #2118)

With this programming you can select the kitchen printer and the receipt printer of the register for the print station to print each individual department data. For details, see "Assigning print stations to department" on page 27.

Procedure

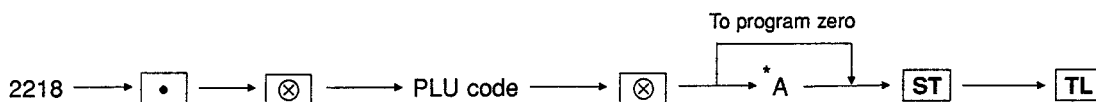


- * A: Printing on receipt = 2
- Printing on on-line remote printer (kitchen printer) = 1
- No printing = 0

② Programming of print stations for PLU data (job #2218)

With this programming you can select the kitchen printer and the receipt printer of the register for the print station to print each individual PLU data. For details, see "Assigning print stations to PLUs" on page 35.

Procedure



*A: Printing on receipt = 2
Printing on on-line remote printer (kitchen printer) = 1
No printing = 0

3-5. Reading the contents of the kitchen printer programming (PGM2 mode)

Procedure



• Sample printout

```
#6410 *PGM2*

#6412
BPS          3
#6510
K.P PROGRAM  1
#6550
K.P FORMAT   000
```

4. Data transmission to kitchen printers

4-1. Transmission of order data

- ① If the kitchen printer has been programmed as a print station when an item (department or PLU) entry is made, order information within the transaction is edited for the kitchen printer and print data is transmitted to the kitchen printer.

• Sample print on a kitchen printer

```
21/09/93      16:51      123456#  
1161      11-1      MEYER  
  
      1 x 003      47.00  
      DPT.03  
      *47.00  
  
      3 x 004      15.00  
      DPT.04  
      *45.00  
  
R      -1 x 004      15.00  
      DPT.04  
      -15.00
```

- ② If an error occurs during data transmission to kitchen printers, a chit receipt is printed on the receipt printer of the register.

• Chit receipt

```
21/09/93 16:51 11-1  
123456#1161 MEYER  
  
KP  
      1x      47.00  
      DPT.03  
003      *47.00  
  
      3x      15.00  
      DPT.04  
004      *45.00  
  
R      -1x      15.00  
      DPT.04  
004      -15.00
```

4-2. Error messages, causes, and remedies

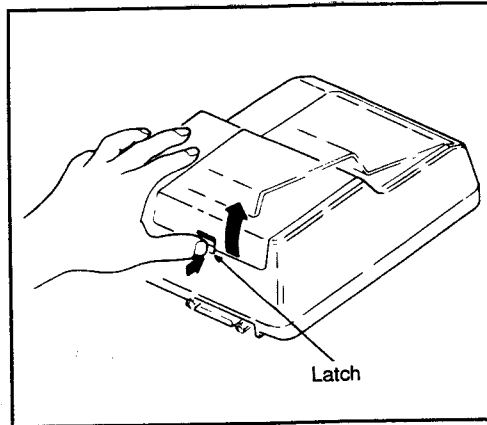
Error message (printed at the journal printer)		Causes and Remedy	
1. <div>KP DISCONNECT</div>	Cause	The kitchen printer and the register are not connected correctly, or the power switch on the kitchen printer is not turned on.	
	Remedy	Connected the kitchen printer and the register correctly (consult your local dealer) or turn on the power switch on the kitchen printer.	
2. <div>KP NO SELECT</div>	Cause	The ON LINE switch on the kitchen printer is not on. (When the ON LINE switch is on, the ON LINE lamp is illuminated.)	
	Remedy	Press the ON LINE switch to turn it on.	
3. <div>KP PAPER EMPTY</div>	Cause	The paper in the kitchen printer is out.	
	Remedy	Press the ON LINE switch on the kitchen printer and make sure the ON LINE lamp is off. Then replace the paper roll with a new one. After the new paper roll is completely installed, press the ON LINE switch again to illuminate the ON LINE lamp.	
4. <div>KP MOTOR LOCK</div>	Cause	A paper jam occurs in the kitchen printer.	
	Remedy	Take the following procedures. (1) Press the ON LINE switch on the kitchen printer to turn off the ON LINE lamp. (2) Remove the paper jam. (3) Press the ON LINE switch to illuminate the ON LINE lamp. (4) Turn off the kitchen printer once and turn it on again.	

5. Replacement of the paper roll

When a red dye appears on the paper roll, it means that it is time to replace the existing paper roll. Replace the paper roll with a new one following the procedures below.

When installing a paper roll for the first time, take steps (1) and (4) through (7).

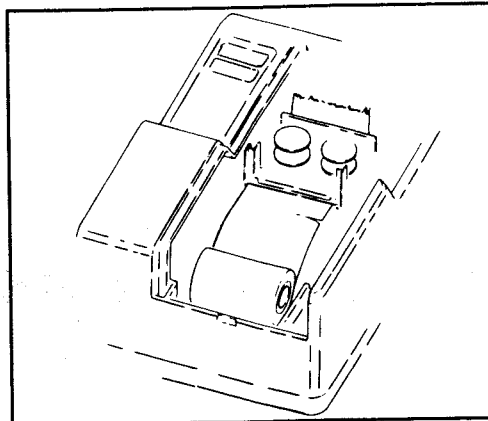
- (1) Unlatch the printer cover and remove it by lifting.



(Fig. 1)

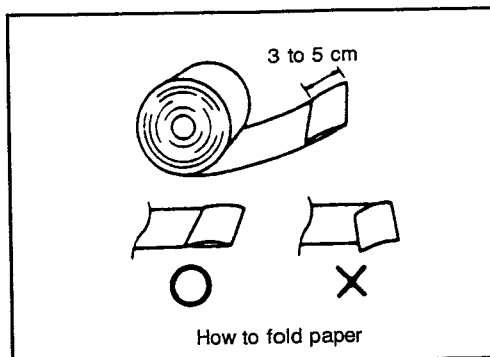
- (2) Cut the paper along the broken line.

- (3) Press the LINE FEED switch to remove the paper remaining in the printer.



(Fig. 2)

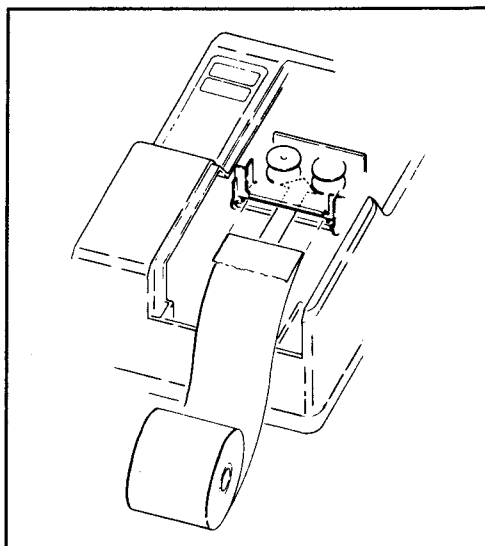
- (4) Fold back the top end of the paper roll by 3 to 5 cm securely.



(Fig. 3)

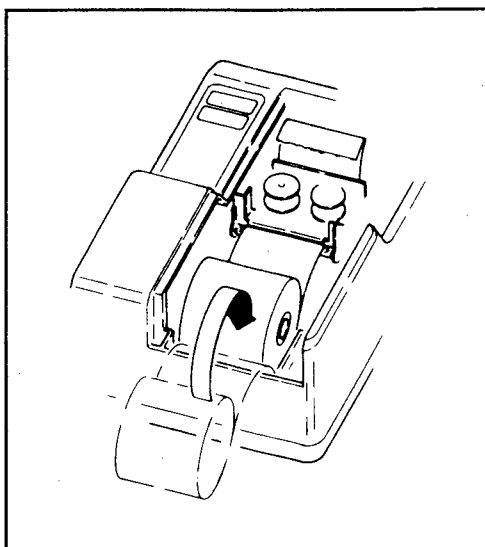
- (5) Insert the end of the folded paper deep into the paper chute of the printer and press the LINE FEED switch to advance the paper.

Note: If paper is not inserted deep enough, it will not advance when the LINE FEED switch pressed.



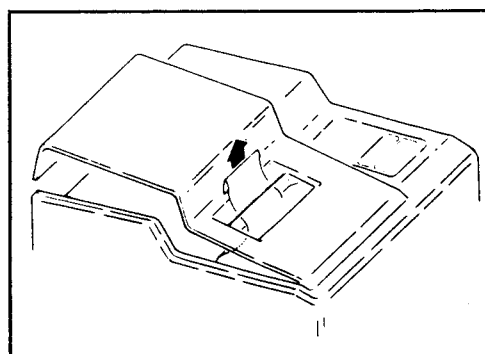
(Fig. 4)

- (6) Pull up the slack of the paper roll and set it in position.



(Fig. 5)

- (7) Pass the top end of the paper through the paper cutter on the printer cover and shut it.



(Fig. 6)

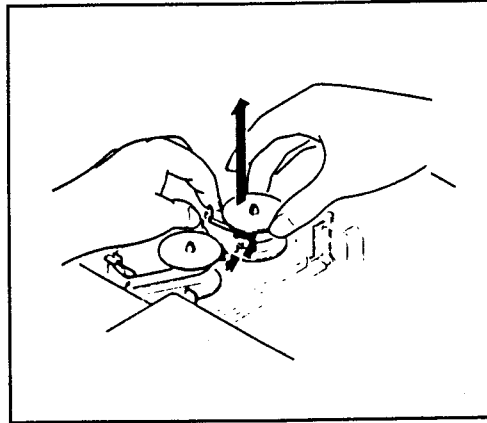
6. Replacement of the ink ribbon

When the print becomes faint, replace the ink ribbon with a new one following the procedures below. Be sure to turn off the kitchen printer before replacing the ink ribbon.

(1) Open the printer cover.

(2) Remove the existing ink ribbon in the following manner.

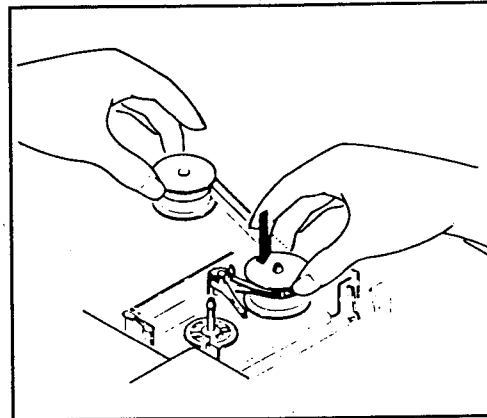
- Pulling the spool stop lever inward, draw out one spool upward.
- Draw out another spool in the same manner as mentioned above.
- Remove both the spools by lifting them gently so that they are not caught by anything.



(Fig. 1)

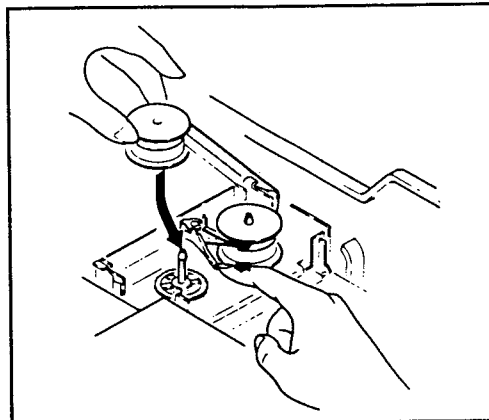
(3) Install a new ink ribbon in the following manner.

- Set one spool on the corresponding spindle with the black side of the ink ribbon facing upward. (The spool stop lever must have been tipped toward the opposite side of the spool.) Then rotate the spool a little to fix it to the spindle completely.



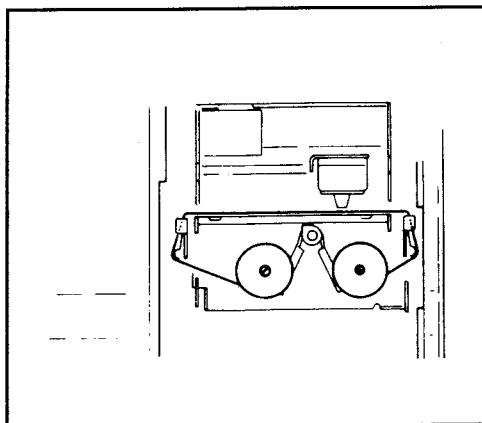
(Fig. 2)

- Tipping the spool stop lever toward the installed spool, set another spool on the corresponding spindle.



(Fig. 3)

- Place the ink ribbon into the space indicated by the broken line in the figure at right and rotate either spool to make the ribbon tight. (Fig. 4)



(Fig. 4)

Replacement of the ink ribbon ends with this.

(4) Close the printer cover.

7. Specifications

Interface:	RS-232C
Duplex type:	Simplex
Line configuration:	Direct connection
Data rate:	9600, 4800, 2400, 1200, 600, or 300 bps. (The data rate can be set to any of the above values. It is set to 9600 bps when the option is shipped.)
Synchronizing mode:	Asynchronous mode
Parity check:	Vertical parity check (odd parity check)
Code:	ASCII
Bit sequence:	LSB
Data format:	1 start bit + 8 data bits + 1 parity bit + 1 stop bit

FOR CUSTOMERS IN U.K.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW:	Earth
BLUE:	Neutral
BROWN:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows. The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol \perp or coloured green or green-and-yellow.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured red.

Ensure that your equipment is connected correctly – if you are in any doubt consult a qualified electrician.

“WARNING: THIS APPARATUS MUST BE EARTHED”

Umweltschutz

Das Gerät wird durch eine Batterie mit Strom versorgt. Um die Batterie sicher und umweltschonend zu entsorgen, beachten Sie bitte folgende Punkte:

- Bringen Sie die leere Batterie zu Ihrer örtlichen Mülldeponie, zum Händler oder zum Kundenservice-Zentrum zur Wiederverwertung.
- Werfen Sie die leere Batterie niemals ins Feuer, ins Wasser oder in den Hausmüll.

Protection de l'environnement

L'appareil est alimenté sur pile. Afin de protéger l'environnement, nous vous recommandons de traiter la pile usagée la façon suivante:

- Apporter la pile usagée à votre centre de traitement des ordures ménagères le plus proche ou, à votre revendeur ou, au service après-vente, pour recyclage.
- Ne jamais jeter la pile usagée dans une source de chaleur, dans l'eau ou dans les vide-ordures.

Miljöskydd

Denna produkt drivs av batteri.

Vid batteribyte skall följande iakttas:

- Det förbrukade batteriet skall inlämnas till er lokala handlare eller till kommunal miljöstation för återinnsamling.
- Kasta ej batteriet i vattnet eller i hushållssoporna. Batteriet får ej heller utsättas för öppen eld.

SHARP CORPORATION
OSAKA, JAPAN

Printed in Japan/Imprimé au Japon
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